

NEVADA ADMINISTRATIVE CODE
CHAPTER 459
HAZARDOUS MATERIALS
REGULATION OF HIGHLY HAZARDOUS SUBSTANCES
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REGULATION OF HIGHLY HAZARDOUS SUBSTANCES

General Requirements

NAC 459.952 Definitions. (NRS 459.3818, 459.3833) As used in NAC 459.952 to 459.95528, inclusive, unless the context otherwise requires, the words and terms defined in NAC 459.95211 to 459.95314, inclusive, have the meanings ascribed to them in those sections.

(Added to NAC by Div. of Environmental Protec., eff. 7-10-92; A by Environmental Comm'n by R121-98, 5-27-99)

NAC 459.95211 "Accidental release" defined. (NRS 459.3818, 459.3833) "Accidental release" means:

1. An unintentional discharge from a facility of any amount of a tier A or tier B substance into the air, water or land; or

2. A fire or an explosion at a facility involving a tier A or tier B substance.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95213 "Active mitigation" defined. (NRS 459.3818, 459.3833) "Active mitigation" means equipment, devices or technologies that work with human, mechanical or other sources of energy, and function to contain or minimize the consequences of an accidental release.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95215 "Administrative controls" defined. (NRS 459.3818, 459.3833) "Administrative controls" means written procedural mechanisms that are used to control a hazard.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95217 "Assessment report" defined. (NRS 459.3818, 459.3833) "Assessment report" means the document submitted to the division pursuant to NAC 459.95448 to 459.95468, inclusive.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.9522 "Assessment team" defined. "Assessment team" means a person or persons designated by the regulated facility pursuant to NRS 459.384 and approved by the division pursuant to NRS 459.3844 to perform an assessment of risk through the analysis of hazards for the regulated facility.

(Added to NAC by Div. of Environmental Protec., eff. 7-10-92)

NAC 459.95225 "C.A.P.P." defined. (NRS 459.3818, 459.3833) "C.A.P.P." means the chemical accident prevention program for the State of Nevada and encompasses the provisions of NRS 459.380 to 459.3874, inclusive, and NAC 459.952 to 459.95528, inclusive.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.9523 "C.A.S." defined. (NRS 459.3818, 459.3833) "C.A.S." means the Chemical Abstracts Service.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95235 "Catastrophic release" defined. (NRS 459.3818, 459.3833) "Catastrophic release" means a major uncontrolled emission, fire or explosion, involving one or more regulated substances, that presents imminent and substantial endangerment to public health and the environment.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.9524 "Division" defined. "Division" means the division of environmental protection of the state department of conservation and natural resources.

(Added to NAC by Div. of Environmental Protec., eff. 7-10-92)

NAC 459.95242 "Emergency response program" defined. (NRS 459.3818, 459.3833) "Emergency response program" is a plan that is developed pursuant to NAC 459.9544 and 459.95442 to respond to emergencies, including, without limitation, an accidental release of a tier A or tier B substance.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95244 "Endpoint" defined. (NRS 459.3818, 459.3833) "Endpoint" means the toxic concentration, ambient overpressure, radiant heat level or lowest flammable gas concentration achieved at the outer geographical boundary of the off-site consequence analysis.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95246 "Environmental receptor" defined. (NRS 459.3818, 459.3833) "Environmental receptor" means:

1. A national or state park, forest or monument;
2. An officially designated wildlife sanctuary, preserve, refuge or area; or
3. A federal wilderness area,

which can be identified on a local map prepared by the United States Geological Survey and which could be exposed to toxic concentrations, radiant heat or overpressure greater than or equal to the endpoints set forth in NAC 459.95364 as a result of an accidental release.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95248 "Facility" defined. (NRS 459.3818, 459.3833) "Facility" means:

1. A stationary source as defined in NAC 459.95293; or
2. A regulated facility as defined in NRS 459.381.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.9525 "Field gas" defined. (NRS 459.3818, 459.3833) "Field gas" means gas that is extracted from a production well before the gas enters a natural gas processing plant.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95252 "Hazard assessment" defined. (NRS 459.3818, 459.3833) "Hazard assessment" means an evaluation of the potential on-site and off-site consequences of an accidental release and the accident history of a facility that an owner or operator develops pursuant to NAC 459.95362 to 459.95378, inclusive.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95254 "Hazard review" defined. (NRS 459.3818, 459.3833) "Hazard review" means the review that is conducted pursuant to NAC 459.95388.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95256 "Hot work" defined. (NRS 459.3818, 459.3833) "Hot work" means work involving electric or gas welding, cutting, brazing, or similar flame-producing or spark-producing operations.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95258 "Injury" defined. (NRS 459.3818, 459.3833) "Injury" means an effect on a human being that:

1. Results from:

(a) Direct exposure to toxic concentrations, radiant heat or overpressures from an accidental release; or

(b) The direct consequences of a vapor cloud explosion from an accidental release, such as flying glass, debris or other projectiles; and

2. Requires medical treatment or hospitalization.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95261 "Major change" defined. (NRS 459.3818, 459.3833) "Major change" means the introduction of:

1. A new process, new process equipment, or a new tier A or tier B substance; or

2. An alteration of process chemistry that results in a change to safe operating limits or introduces a new hazard.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95263 "Medical treatment" defined. (NRS 459.3818, 459.3833) "Medical treatment" means treatment, other than first aid, that is administered by a physician or other personnel pursuant to standing orders from a physician.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95265 "Mitigation" and "mitigation system" defined. (NRS 459.3818, 459.3833) "Mitigation" or "mitigation system" means activities, technologies or equipment specifically designed or deployed to capture or control a substance upon loss of containment in order to minimize exposure of the public or the environment.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95267 "N.A.I.C.S." defined. (NRS 459.3818, 459.3833) "N.A.I.C.S." means the North American Industry Classification System.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95269 "Natural gas processing plant" defined. (NRS 459.3818, 459.3833) "Natural gas processing plant" means a processing site that:

1. Is engaged in:

- (a) The extraction of natural gas liquids from field gas;
- (b) The fractionation of mixed natural gas liquids to natural gas products; or
- (c) Both extraction and fractionation; and

2. Is classified as N.A.I.C.S. code 211112, which is adopted by reference pursuant to NAC 459.95528.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95271 "N.F.P.A." defined. (NRS 459.3818, 459.3833) "N.F.P.A." means the National Fire Protection Association.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95273 "Off-site" defined. (NRS 459.3818, 459.3833) "Off-site" means an area:

- 1. Beyond the property boundary of the facility; and

2. Within the property boundary to which the public has routine and unrestricted access during or outside business hours.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95275 "Owner or operator" defined. (NRS 459.3818, 459.3833) "Owner or operator" means the person who is responsible for the implementation of C.A.P.P.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95277 "Passive mitigation" defined. (NRS 459.3818, 459.3833) "Passive mitigation" means equipment, devices or technologies that work without human, mechanical or other sources of energy, and function to contain or minimize the consequences of an accidental release.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95279 "Prevention program" defined. (NRS 459.3818, 459.3833) "Prevention program" means procedures and practices that are developed and implemented pursuant to NAC 459.95386 to 459.95398, inclusive, or NAC 459.95412 to 459.95435, inclusive, to:

1. Prevent the accidental release of a tier A or tier B substance;
2. Minimize the likelihood of an accidental release; or
3. Mitigate the impacts of an accidental release.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95281 "Process" defined. (NRS 459.3818, 459.3833) "Process" means an activity that involves a tier A or tier B substance, including, without limitation, the use, storage, manufacturing, handling or on-site movement of such a substance or a combination of such activities. The term includes a group of vessels that is interconnected or a group of separate vessels that is located in such a manner that a tier A or tier B substance could be involved in a potential release.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95283 "Process hazard analysis" defined. (NRS 459.3818, 459.3833) "Process hazard analysis" means the analysis performed pursuant to NAC 459.95414.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95285 "Produced water" defined. (NRS 459.3818, 459.3833) "Produced water" means water that is:

1. Extracted from the earth from an oil or natural gas production well; or
2. Separated from oil or natural gas after extraction.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95287 "P.T.A.H." defined. (NRS 459.3818, 459.3833) "P.T.A.H." means the plan to abate hazards that is submitted pursuant to subsection 3 of NRS 459.3852 and NAC 459.95452.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95289 "Public" defined. (NRS 459.3818, 459.3833) "Public" means one or more natural persons other than employees or contractors of a facility.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95291 "Public receptor" defined. (NRS 459.3818, 459.3833) "Public receptor" means an off-site:

1. Residence;
2. Institution such as a school or hospital;
3. Industrial, commercial or office building; or
4. Park or recreational area,

that is inhabited or occupied by the public without restriction by the facility, in which the public could be exposed as a result of an accidental release to toxic concentrations, radiant heat or overpressure.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95293 "Stationary source" defined. (NRS 459.3818, 459.3833)

1. "Stationary source" means buildings, structures, equipment, installations or substances that participate in activities:

- (a) Which belong to the same industrial group;
- (b) Which are located on one or more contiguous properties;
- (c) Which are under the control of the same person; and
- (d) From which an accidental release may occur.

Properties are not contiguous for purposes of this subsection solely because of a railroad or gas pipeline right of way.

2. The term includes, without limitation, transportation containers that are:

- (a) No longer under active shipping papers; and
- (b) Connected to equipment described in subsection 1 for temporary storage, loading or unloading.

3. The term does not include transportation of, or storage incident to transportation of, a tier A or tier B substance or other extremely hazardous substance pursuant to the provisions of C.A.P.P., if such transportation is regulated pursuant to 49 C.F.R. Part 192, 193 or 195.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95295 "Substance" defined. (NRS 459.3818, 459.3833) "Substance" means a chemical that is listed in the table in NAC 459.9533.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95297 "Threshold quantity" defined. (NRS 459.3818, 459.3833) "Threshold quantity" means the quantity specified in the table in NAC 459.9533 for tier A or tier B substances.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95299 "Tier A substance" defined. (NRS 459.3818, 459.3833) "Tier A substance" means a substance for which an accident prevention program is required pursuant to subparagraph (1) of paragraph (b) of subsection 1 of NRS 459.3813.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.9531 "Tier B substance" defined. (NRS 459.3818, 459.3833) "Tier B substance" means a substance for which an accident prevention program is required pursuant to NRS 459.3833.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95312 "Vessel" defined. (NRS 459.3818, 459.3833) "Vessel" means a reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose or other container.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95314 "Worst-case release" defined. (NRS 459.3818, 459.3833) "Worst-case release" means the release of the largest quantity of a tier A or tier B substance from a failure of a vessel or process line that results in the greatest distance to an endpoint defined in NAC 459.95364.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Applicability

NAC 459.95321 Determination of program tier. (NRS 459.3818, 459.3833) The owner or operator shall, pursuant to NAC 459.95321 to 459.9533, inclusive, determine for each process within the boundary of his facility whether the process is subject to the tier A program or tier B program, or both.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95323 Tier A program. (NRS 459.3818)

1. Except as otherwise provided in NAC 459.95486, a process is subject to the tier A program if the process is not exempted pursuant to NRS 459.3814 and a substance is present within the contiguous boundary of the facility in a quantity:

(a) Equal to or greater than the amount listed in the table in NAC 459.9533 under the column labeled "Tier A Threshold Quantity"; or

(b) Less than the amount listed in the table in NAC 459.9533 under the column labeled "Tier A Threshold Quantity" if there are two or more releases of one or more tier A substances from the facility during a 12-month period and the quantity for each release is in excess of the amount listed in the table in NAC 459.9533 for the substance under the column labeled "Two Release Quantity."

2. If the table in NAC 459.9533 under the column labeled "Tier A Threshold Quantity" is blank, the tier A program does not apply to that substance.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95325 Tier B program. (NRS 459.3818, 459.3833)

1. A process is subject to the tier B program if:

(a) The process is not exempted pursuant to subsection 1 of NRS 459.3814; and

(b) A substance is present in a quantity equal to or greater than the amount listed in the table in NAC 459.9533 under the column labeled "Tier B Threshold Quantity." If the table in NAC 459.9533 under the column labeled "Tier B Threshold Quantity" is blank, the tier B program does not apply to that substance.

2. The following substances need not be considered when determining whether more than a threshold quantity is present at a facility:

(a) A tier B toxic substance, if the concentration of the substance in a mixture is less than 1 percent by weight of the mixture. Except for oleum, toluene 2, 4-diisocyanate, toluene 2, 6-diisocyanate and toluene diisocyanate (unspecified isomer), if the concentration of the toxic substance in the mixture is 1 percent or greater by weight of the mixture and the owner or operator demonstrates in writing that the partial pressure of the regulated substance in the mixture under handling or storage conditions in any portion of the process is less than 10 millimeters of mercury, the amount of the substance in the mixture in that portion of the process need not be considered when determining whether more than a threshold quantity is present at the stationary source. A toxic substance is designated "T" in the table in NAC 459.9533 under the column labeled "Tox (T), Flam (F) or Expl (E)."

(b) Except as otherwise provided in paragraphs (c) and (d), a tier B flammable substance, if the concentration of the substance in a mixture is less than 1 percent by weight of the mixture or the concentration of the tier B flammable substance in the mixture is 1 percent or greater by weight of the mixture and the owner or operator demonstrates in writing that the mixture does not have a flammability hazard rating of 4 as described in N.F.P.A. 704, the Standard System for the

Identification of the Hazards of Materials for Emergency Response of the N.F.P.A., which is adopted by reference pursuant to NAC 459.95528. If the concentration of the tier B flammable substance in the mixture is 1 percent or greater by weight of the mixture and the owner or operator does not demonstrate that the mixture does not have a flammability hazard rating of 4, the entire weight of the mixture must be treated as the tier B flammable substance to determine whether a threshold quantity is present at the facility. Boiling and flash point must be defined and determined pursuant to N.F.P.A. 30, the 1996 version of the Flammable and Combustible Liquids Code of the N.F.P.A., which is adopted by reference pursuant to NAC 459.95528. A flammable substance is designated "F" in the table in NAC 459.9533 under the column labeled "Tox (T), Flam (F) or Expl (E)."

(c) Gasoline, if it is distributed or stored for use as fuel for an internal combustion engine.

(d) A naturally occurring hydrocarbon mixture before such a mixture has entered into a natural gas processing plant or a petroleum refining process unit. A naturally occurring hydrocarbon mixture includes any combination of condensate, crude oil, field gas and produced water.

(e) A tier B substance that is contained in an article.

(f) A tier B substance when it is being used:

(1) As a structural component of the facility;

(2) With products for routine janitorial maintenance;

(3) By employees in foods, drugs, cosmetics or other personal items;

(4) In process water or noncontact cooling water drawn from the environment or municipal sources; or

(5) In air as compressed air or as part of combustion.

(g) A tier B substance that is manufactured, processed or used in a laboratory at a facility under the supervision of a technically qualified individual as defined in 40 C.F.R. § 720.3(ee). This exemption does not apply to:

(1) Specialty chemical production;

(2) Manufacture, processing or use of a tier B substance in pilot plant scale operations;

or

(3) Activities conducted outside of the laboratory.

(h) Ammonia, when it is held by farmers and used as an agricultural nutrient.

(i) Propane, if the process is subject to tier B program level 1 or 2 pursuant to NAC 459.95327.

3. As used in this section:

(a) "Article" means a manufactured item, as defined in 29 C.F.R. § 1910.1200(c), that:

- (1) Is formed to a specific shape or design during manufacture;
- (2) Has end-use functions dependent in whole or in part upon the shape or design during end use; and
- (3) Does not release or otherwise result in exposure to a tier A or tier B substance under normal conditions of processing and use.

(b) "Condensate" means hydrocarbon liquid separated from natural gas that condenses because of changes in temperature or pressure, or both, and remains liquid at standard conditions.

(c) "Crude oil" means a naturally occurring, unrefined petroleum liquid.

(d) "Petroleum refining process" means a process that:

(1) Is used in an establishment which is primarily engaged in petroleum refining as defined in N.A.I.C.S. code 32411, which is adopted by reference pursuant to NAC 459.95528; and

(2) Is used to:

(I) Produce:

- (i) A transportation fuel such as gasoline, diesel fuel or jet fuel;
- (ii) A heating fuel such as kerosene, fuel gas distillate or fuel oil; or
- (iii) A lubricant;

(II) Separate petroleum; or

(III) Separate, crack, react or reform an intermediate petroleum stream.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95327 Determination of program level for tier B program. (NRS 459.3818, 459.3833)

1. If an owner or operator determines pursuant to NAC 459.95325 that a process is subject to the tier B program, he shall determine the program level for the process pursuant to subsections 2, 3 and 4.

2. A process is subject to program level 1 if:

(a) During the 5 years immediately preceding the submission of an assessment report, the process has not had an accidental release of a tier B substance pursuant to which exposure to:

(1) The substance;

- (2) A reaction product of the substance;
- (3) Overpressure generated by an explosion involving the substance; or
- (4) Radiant heat generated by a fire involving the substance,

resulted in the death of or injury to a person who was located on-site or off-site or in a restoration activity to an environmental receptor;

(b) The distance to a toxic or flammable endpoint for a worst-case release assessment conducted pursuant to NAC 459.95366 is less than the distance to any public receptor;

(c) Emergency response procedures have been coordinated between the facility and local emergency planning and response organizations; and

(d) The process is not subject to the tier A program.

3. A process is subject to program level 2 if the process is subject to the tier B program and is not subject to program level 1 or 3.

4. A process is subject to program level 3 if the process is not subject to program level 1 and:

(a) The process is listed in N.A.I.C.S. code 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311 or 32532, which are adopted by reference pursuant to NAC 459.95528; or

(b) The process is subject to the process safety management standard set forth in 29 C.F.R. § 1910.119.

5. If a process that involves a tier B substance is no longer required to satisfy the requirements of a particular program level, the owner or operator shall ensure that the process satisfies the requirements of the new program level.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Table of Substances

NAC 459.9533 Tabulated values for tier A threshold quantity, tier B threshold quantity, two release quantity and toxic endpoints. (NRS 459.3818, 459.3833)

1. Substances that are designated in the table in this section as having a tier A threshold quantity include, without limitation, the substances that are listed in NRS 459.3816.

2. Substances that are designated in the table in this section as having a tier B threshold quantity include, without limitation, the substances that are listed in 40 C.F.R. § 68.130.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Acetaldehyde			75-07-0	2,500	10,000	1,000	1	F	
Acetylene	Ethyne		74-86-2		10,000			F	
Acrolein	2-Propenol		107-02-8	150	5,000	1	1&2	T	0.0011
Acrylonitrile	2-Propenenitrile		107-13-1		20,000			T	0.076
Acrylyl chloride	2-Propenoyl chloride		814-68-6	250	5,000	100	2	T	0.00090
Alkylaluminums				5,000		50*	3		
Allyl alcohol	2-Propen-1-ol		107-18-6		15,000			T	0.036
Allyl chloride			107-05-1	1,000		100	3		
Allylamine	2-Propen-1-amine		107-11-9	1,500	10,000	500	2	T	0.0032
Ammonia	Anhydrous Ammonia	Anhydrous	7664-41-7	5,000	10,000	100	1&2	T	0.14
Ammonia	Ammonia solution	20wt% or greater	7664-41-7		20,000			T	0.14
Ammonia	Ammonia solution	44wt% or greater	7664-41-7	10,000		100	3		
Ammonium perchlorate			7790-98-9	7,500		75*	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Ammonium permanganate			7787-36-2	7,500		75*	3		
Arsenous trichloride			7784-34-1		15,000			T	0.010
Arsine	Arsenic Hydride		7784-42-1	100	1,000	10	3	T	0.0019
bis(Chloromethyl) Ether	Chloromethyl Ether		542-88-1	100	1,000	10	1&2	T	0.00025
Boron trichloride			10294-34-5	2,500	5,000	100	3	T	0.010
Boron trifluoride			7637-07-2	250	5,000	25	3	T	0.028
Boron trifluoride w/Methyl Ether		1:1 ratio	353-42-4		15,000			T	0.023
Bromine			7726-95-6	1,500	10,000	500	2	T	0.0065
Bromine chloride			13863-41-7	1,500		10	3		
Bromine pentafluoride			7789-30-2	2,500		100	3		
Bromine trifluoride			7787-71-5	15,000		100	3		
Bromotrifluoroethylene			598-73-2		10,000			F	
1,3-Butadiene			106-99-0		10,000			F	
Butane			106-97-8		10,000			F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
1-Butene			106-98-9		10,000			F	
2-Butene			107-01-7		10,000			F	
Butene			25167-67-3		10,000			F	
2-Butene-cis			590-18-1		10,000			F	
2-Butene-trans	[2-Butene, (E)]		624-64-6		10,000			F	
Butyl hydroperoxide (Tertiary)			75-91-2	5,000		50*	3		
Butyl perbenzoate (Tertiary)			614-45-9	7,500		75*	3		
Carbon disulfide			75-15-0		20,000			T	0.16
Carbon oxysulfide	Carbon Oxide Sulfide		463-58-1		10,000			F	
Carbonyl fluoride			353-50-4	2,500		10	3		
Cellulose nitrate		12.6% nitrogen or greater	9004-70-0	2,500		25*	3		
Chlorine			7782-50-5	1,500	2,500	10	1&2	T	0.0087
Chlorine dioxide			10049-04-4	1,000	1,000	100	3	T	0.0028

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Chlorine monoxide			7791-21-1		10,000			F	
Chlorine pentafluoride			13637-63-3	1,000		10	3		
Chlorine trifluoride			7790-91-2	1,000		100	3		
Chlorodiethylaluminum	Diethylaluminum Chloride		96-10-6	5,000		50*	3		
1-Chloro-2,4-Dinitrobenzene			97-00-7	5,000		50*	3		
Chloroform			67-66-3		20,000			T	0.49
Chloromethyl methyl ether			107-30-2	500	5,000	10	1&2	T	0.0018
Chloropicrin			76-06-2	500		50	3		
Chloropicrin/Methylbromide mix				1,500		500	3		
Chloropicrin/Methylchloride mix				1,500		500	3		
1-Chloropropylene			590-21-6		10,000			F	
2-Chloropropylene			557-98-2		10,000			F	
Crotonaldehyde	2-Butenal		4170-30-3		20,000			T	0.029
Crotonaldehyde, (E)-	2-Butenal, (E)-		123-73-9		20,000			T	0.029

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Cumene Hydroperoxide			80-15-9	5,000		10	1		
Cyanogen	Ethanedinitrile		460-19-5	2,500	10,000	100	1	F	
Cyanogen chloride			506-77-4	500	10,000	10	1	T	0.030
Cyanuric fluoride			675-14-9	100		10	3		
Cyclohexylamine	Cyclohexanimine		108-91-8		15,000			T	0.16
Cyclopropane			75-19-4		10,000			F	
Diacetyl peroxide		70% or greater	110-22-5	5,000		50*	3		
Diazomethane			334-88-3	500		10	3		
Dibenzoyl peroxide			94-36-0	7,500		75*	3		
Diborane			19287-45-7	100	2,500	10	3	T	0.0011
Dibutyl peroxide (tertiary)			110-05-4	5,000		50*	3		
Dichloro acetylene			7572-29-4	250		10	3		
Dichlorosilane			4109-96-0	2,500	10,000	100	3	F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Diethylzinc			557-20-0	10,000		100*	3		
Difluoroethane			75-37-6		10,000			F	
Diisopropyl peroxydicarbonate			105-64-6	7,500		75*	3		
Dilauroyl peroxide			105-74-8	7,500		75*	3		
Dimethyl sulfide			75-18-3	100		10	3		
Dimethylamine (anhydrous)			124-40-3	2,500	10,000	1,000	1	F	
Dimethyldichlorosilane			75-78-5	1,000	5,000	500	2	T	0.026
1,1-Dimethylhydrazine			57-14-7	1,000	15,000	10	1&2	T	0.012
2,2-Dimethylpropane			463-82-1		10,000			F	
Epichlorohydrin			106-89-8		20,000			T	0.076
Ethane			74-84-0		10,000			F	
Ethyl acetylene	1-Butyne		107-00-6		10,000			F	
Ethyl chloride			75-00-3		10,000			F	
Ethyl ether			60-29-7		10,000			F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Ethyl mercaptan	Ethanethiol		75-08-1		10,000			F	
Ethyl nitrite			109-95-5	5,000	10,000	50*	3	F	
Ethylamine	Ethanamine		75-04-7	7,500	10,000	100	1	F	
Ethylene	Ethene		74-85-1		10,000			F	
Ethylene fluorohydrin			371-62-0	100		10	2		
Ethylene oxide	Oxirane		75-21-8	5,000	10,000	10	1&2	T	0.090
Ethylenediamine			107-15-3		20,000			T	0.49
Ethyleneimine	Aziridine		151-56-4	1,000	10,000	1	1&2	T	0.018
Fluorine			7782-41-4	1,000	1,000	10	1&2	T	0.0039
Formaldehyde		90% or greater	50-00-0	1,000	15,000	100	1&2	T	0.012
Furan			110-00-9	500	5,000	100	1&2	T	0.0012
Hexafluoroacetone			684-16-2	5,000		10	3		
Hydrazine			302-01-2		15,000			T	0.011
Hydrochloric acid		37% or greater	7647-01-0		15,000	1,000	3	T	0.030

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Hydrofluoric acid		50% or greater	7664-39-3		1,000	100	1	T	0.016
Hydrogen			1333-74-0		10,000			F	
Hydrogen bromide			10035-10-6	5,000		10	3		
Hydrogen chloride		Anhydrous	7647-01-0	5,000	5,000	100	3	T	0.030
Hydrogen cyanide	Hydrocyanic acid	Anhydrous	74-90-8	1,000	2,500	10	1&2	T	0.011
Hydrogen fluoride		Anhydrous	7664-39-3	1,000		100	1&2		
Hydrogen peroxide		52 wt% or greater	7722-84-1	7,500		1,000	2		
Hydrogen selenide			7783-07-5	150	500	10	2	T	0.00066
Hydrogen sulfide			7783-06-4	1,500	10,000	100	1&2	T	0.042
Hydroxylamine			7803-49-8	2,500		25*	3		
Iron, pentacarbonyl			13463-40-6	250	2,500	100	2	T	0.00044
Isobutane			75-28-5		10,000			F	
Isobutyronitrile			78-82-0		20,000			T	0.14

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Isopentane			78-78-4		10,000			F	
Isoprene			78-79-5		10,000			F	
Isopropyl chloride			75-29-6		10,000			F	
Isopropyl chloroformate			108-23-6		15,000			T	0.10
Isopropyl formate			625-55-8	500		100	3		
Isopropylamine			75-31-0	5,000	10,000	1,000	3	F	
Ketene			463-51-4	100		10	3		
Methacrylaldehyde			78-85-3	1,000		500	3		
Methacryloyl chloride			920-46-7	150		100	2		
Methacryloyloxyethyl isocyanate			30674-80-7	100		10	3		
Methane			74-82-8		10,000			F	
Methyl acrylonitrile	Methacrylonitrile		126-98-7	250	10,000	25	3	T	0.0027
Methyl bromide			74-83-9	2,500		500	3		
3-Methyl-1-butene			563-45-1		10,000			F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
2-Methyl-1-butene			563-46-2		10,000			F	
Methyl chloride			74-87-3	15,000	10,000	100	1	T	0.82
Methyl chloroformate			79-22-1	500	5,000	100	3	T	0.0019
Methyl disulfide			624-92-0	100		10	3		
Methyl ether			115-10-6		10,000			F	
Methyl ethyl ketone peroxide		60% or greater	1338-23-4	5,000		10	1		
Methyl fluoroacetate			453-18-9	100		10	3		
Methyl fluorosulfate			421-20-5	100		10	3		
Methyl formate			107-31-3		10,000			F	
Methyl hydrazine			60-34-4	100	15,000	10	1&2	T	0.0094
Methyl iodide			74-88-4	7,500		100	1		
Methyl isocyanate			624-83-9	250	10,000	10	1&2	T	0.0012
Methyl mercaptan			74-93-1	5,000	10,000	100	1&2	T	0.049
Methyl thiocyanate			556-64-9		20,000			T	0.085

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Methyl vinyl ketone			78-94-4	100		10	2		
Methylamine	Methanamine	Anhydrous	74-89-5	1,000	10,000	100	1	F	
2-Methylpropene			115-11-7		10,000			F	
Methyltrichlorosilane			75-79-6	500	5,000	50	3	T	0.018
Nickel carbonyl			13463-39-3	150	1,000	10	1&2	T	0.00067
Nitric acid		80% or greater	7697-37-2		15,000			T	0.026
Nitric acid		94.5 wt% or greater	7697-37-2	500		50	3		
Nitric oxide	Nitrogen oxide		10102-43-9	250	10,000	10	1&2	T	0.031
Nitroaniline	para Nitroaniline		100-01-6	5,000		50*	3		
Nitrogen dioxide			10102-44-0	250		10	1&2		
Nitrogen oxides		NO; NO ₂ ; N ₂ O ₄ ; N ₂ O ₃	10102-44-0	250		10	3		
Nitrogen tetroxide			10544-72-6	250		10	1		
Nitrogen trifluoride			7783-54-2	5,000		1,000	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Nitrogen trioxide			10544-73-7	250		10	3		
Nitromethane			75-52-5	2,500		25*	3		
Oleum	Fuming sulfuric acid	65 wt% or greater of SO ₃	8014-95-7	1,000	10,000	500	3	T	0.010
Osmium tetroxide			20816-12-0	100		10	3		
Oxygen difluoride	Fluorine monoxide		7783-41-7	100		10	3		
Ozone			10028-15-6	100		10	3		
Pentaborane			19624-22-7	100		10	3		
1,3-Pentadinene			504-60-9		10,000			F	
Pentane			109-66-0		10,000			F	
1-Pentene			109-67-1		10,000			F	
2-Pentene, (E)-			646-04-8		10,000			F	
2-Pentene, (Z)-			627-20-3		10,000			F	
Peracetic acid	Peroxyacetic acid		79-21-0	5,000	10,000	500	2	T	0.0045

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Perchloric acid		60% or greater	7601-90-3	5,000		50*	3		
Perchloromethyl mercaptan			594-42-3	150	10,000	100	1&2	T	0.0076
Perchloryl fluoride			7616-94-6	5,000		100	3		
Phosgene	Carbonyl chloride		75-44-5	100	500	10	1&2	T	0.00081
Phosphine	Hydrogen phosphide		7803-51-2	100	5,000	10	3	T	0.0035
Phosphorus oxychloride	Phosphoryl chloride		10025-87-3	1,000	5,000	500	3	T	0.0030
Phosphorus trichloride			7719-12-2	1,000	15,000	500	3	T	0.028
Piperidine			110-89-4		15,000			T	0.022
Propadiene	1,2 Propadiene		463-49-0		10,000			F	
Propane			74-98-6		10,000			F	
Propargyl bromide			106-96-7	7,500		10	2		
Propionitrile			107-12-0		10,000			T	0.0037
Propyl chloroformate			109-61-5		15,000			T	0.010
Propyl nitrate			627-13-4	2,500		25*	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Propylene	1 Propene		115-07-1		10,000			F	
Propylene oxide			75-56-9		10,000			T	0.59
Propyleneimine			75-55-8		10,000			T	0.12
Propyne	1-Propyne		74-99-7		10,000			F	
Sarin			107-44-8	100		10	2		
Selenium hexafluoride			7783-79-1	1,000		1	1		
Silane			7803-62-5		10,000			F	
Stibine	Antimony hydride		7803-52-3	500		10	3		
Sulfur dioxide		Anhydrous	7446-09-5	1,000	5,000	100	3	T	0.0078
Sulfur pentafluoride			5714-22-7	250		10	3		
Sulfur tetrafluoride			7783-60-0	250	2,500	10	3	T	0.0092
Sulfur trioxide	Sulfuric Anhydride		7446-11-9	1,000	10,000	100	2	T	0.010
Tellurium hexafluoride			7783-80-4	250		10	3		
Tetrafluoroethylene			116-14-3	5,000	10,000	1,000	3	F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Tetrafluorohydrazine			10036-47-2	5,000		500	3		
Tetramethyl Lead			75-74-1	7,500	10,000	100	1	T	0.0040
Tetramethylsilane			75-76-3		10,000			F	
Tetranitromethane			509-14-8		10,000			T	0.0040
Thionyl chloride			7719-09-7	250		100	3		
Titanium tetrachloride			7550-45-0	2,500	2,500	1,000	1&2	T	0.020
Toluene 2,4-diisocyanate			584-84-9		10,000			T	0.0070
Toluene 2,6-diisocyanate			91-08-7		10,000			T	0.0070
Toluene diisocyanate			26471-62-5		10,000			T	0.0070
Trichloro(chloromethyl) silane			1558-25-4	100		10	3		
Trichloro(dichlorophenyl) silane			27137-85-5	2,500		500	2		
Trichlorosilane			10025-78-2	5,000	10,000	500	3	F	
Trifluorochloroethylene			79-38-9	10,000	10,000	500	3	F	
Trimethoxysilane			2487-90-3	1,500		500	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Trimethylamine			75-50-3		10,000			F	
Trimethylchlorosilane			75-77-4		10,000			T	0.050
Vinyl acetate monomer			108-05-4		15,000			T	0.26
Vinyl acetylene			689-97-4		10,000			F	
Vinyl chloride			75-01-4		10,000			F	
Vinyl ethyl ether			109-92-2		10,000			F	
Vinyl fluoride			75-02-5		10,000			F	
Vinyl methyl ether			107-25-5		10,000			F	
Vinylidene chloride			75-35-4		10,000			F	
Vinylidene fluoride			75-38-7		10,000			F	

Table Notes:

1. For Two Release Source Column: 1 = RQ as listed in 40 C.F.R. Part 302; 2 = RQ as listed in 40 C.F.R. Part 355; 3 = Two Release Quantity as determined in “Technical Basis Document for C.A.P.P. Two Release Quantities and Toxic Endpoints.”

* These substances must be involved in a fire or explosion to qualify as a release pursuant to paragraph (b) of subsection 1 of section 42 of this regulation.

General Performance and Submission Requirements

NAC 459.95332 General requirements. (NRS 459.3818, 459.3833) The owner or operator of a facility that has a process which is subject to the tier A program or tier B program shall:

1. Register annually with the division pursuant to NAC 459.95348 to 459.95358, inclusive;
2. Pay fees pursuant to NAC 459.95334; and
3. Develop a management system pursuant to NAC 459.95516.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95334 Annual fee. [Effective July 1, 2001.] (NRS 459.3818, 459.3833)

1. An owner or operator shall pay the fee required by subsections 1 and 2 of NRS 459.3824 before July 31 of each year.

2. The amount of this annual fee for each facility will equal the sum of:

- (a) A base fee that is established pursuant to subsection 3; and
- (b) A graduated fee that is established pursuant to subsection 4.

3. The amount of the annual base fee that is authorized pursuant to subsection 1 of NRS 459.3824 is:

(a) If the facility has a process that is subject to the tier A program or tier B program level 3, \$4,100.

(b) If the facility has a process that is subject to the tier B program level 2 and no process that is subject to the tier A program or tier B program level 3, \$2,000.

(c) If the facility has a process that is subject to the tier B program level 1 and no process that is subject to the tier A program or tier B program level 2 or 3, \$250.

4. The amount of the annual graduated fee that is authorized pursuant to subsection 2 of NRS 459.3824 is \$23.00 per unit of substance at a facility. A unit of substance is the greater of:

(a) The total amount of a tier A substance that is present at a facility divided by the tier A threshold quantity for the substance that is listed in NAC 459.9533; or

(b) The total amount of a tier B substance that is present at a facility divided by the tier B threshold quantity for the substance that is listed in NAC 459.9533.

(Added to NAC by Environmental Comm'n, eff. 7-6-92; A by R121-98, 5-27-99, eff. 6-21-99; R087-00, 7-27-2000, eff. 7-1-2001)

NAC 459.95336 Requirements specific to tier A program. (NRS 459.3818) In addition to the requirements set forth in NAC 459.95332, the owner or operator of a facility with a process that is subject to the tier A program shall:

1. Submit assessment plans, prioritization schedules and information about the assessment team pursuant to NAC 459.95476;
2. Conduct a hazard assessment pursuant to NAC 459.95362 to 459.95378, inclusive;
3. Implement a prevention program pursuant to NAC 459.95382 and 459.95412 to 459.95435, inclusive;
4. Implement an emergency response program pursuant NAC 459.9544 and 459.95442;
5. Submit assessment reports pursuant to NAC 459.95448 to 459.95468, inclusive; and
6. Submit an annual compliance report pursuant to NAC 459.9548 and 459.95482.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95338 Requirements specific to tier B program. (NRS 459.3818, 459.3833) In addition to the requirements set forth in NAC 459.95332, the owner or operator of a facility with a process that is subject to the tier B program, but not also subject to the tier A program, shall:

1. Determine the program level for the process pursuant to NAC 459.95327;
2. Conduct a hazard assessment pursuant to NAC 459.95362 to 459.95378, inclusive;
3. Implement a prevention program for each process subject to program level 2 pursuant to NAC 459.95382 to 459.95398, inclusive;
4. Implement a prevention program for each process subject to program level 3 pursuant to NAC 459.95382 and 459.95412 to 459.95435, inclusive;
5. Implement an emergency response program pursuant to NAC 459.9544 and 459.95442; and
6. Submit an assessment report pursuant to NAC 459.95448 to 459.95468, inclusive.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95342 Requirements for both tier A and tier B programs. (NRS 459.3818, 459.3833) The owner or operator of a facility with a process that is subject to both the tier A program and tier B program shall comply with the general requirements set forth in NAC 459.95332 and comply with the requirements for a tier A process set forth in NAC 459.95336, except that:

1. The timing for initial registration must be in accordance with paragraph (b) of subsection 3 of NAC 459.95348; and

2. The timing for submission of the assessment report must be in accordance with NAC 459.9545.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95344 Reports of regulatory agencies: Submission; form. A governmental entity or agency of the state that is required by subsection 1 of NRS 459.382 to submit a report to the division shall do so within 10 working days after a determination is made or an action is taken related to hazards involving highly hazardous substances at a regulated facility. The report must be submitted on the following form:

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
PREVENTION OF CHEMICAL CATASTROPHE PROGRAM
GOVERNMENTAL AGENCY REPORTING FORM

A facility which produces, uses, stores or handles a highly hazardous substance designated in NRS 459.3816 is subject to the provisions of NRS 459.380 to 459.3874, inclusive. Pursuant to NRS 459.382, governmental entities or agencies of the state are required to complete the following information whenever a determination is made or an action is taken related to hazards involving highly hazardous substances at a regulated facility. Please complete this form and return it to the Nevada Division of Environmental Protection, 333 W. Nye Lane, Carson City, Nevada 89710.

1. Facility Name
2. Facility Location
3. Highly Hazardous Substances Present at the Facility

Substance	Estimated Quantity (lbs.)
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4. Describe any specific hazards related to highly hazardous substances which were noticed by regulatory or inspection staff at the facility
5. Describe any action your agency has taken at this facility related to highly hazardous substances. Include orders, notices, penalties, etc.
6. List statutes, regulations, standards or codes related to or controlling actions taken by your agency
7. Agency contact: Phone:
8. Authorized signature: Date:

Attach additional sheets if required.

(Added to NAC by Div. of Environmental Protec., eff. 7-10-92)—Substituted in revision for NAC 459.9532)

Annual Registration Form

NAC 459.95348 Submission; content; time requirements. (NRS 459.3818, 459.3833)

1. The owner or operator shall:

(a) Complete annually a single registration form covering all processes, both tier A and tier B;
and

(b) Submit the registration to the division on or before June 21 of each year.

2. The registration must show the maximum quantity of all tier A and tier B substances on-site between June 1 of the previous year and May 30 of the current year.

3. Upon starting a new process, the owner or operator shall submit an initial registration:

(a) If the process is subject to tier A and not tier B, pursuant to NAC 459.95348 to 459.95358, inclusive, within 10 days after bringing the tier A substance on-site.

(b) If the process is subject to tier B, regardless of whether the process is subject to tier A:

(1) Pursuant to NAC 459.95348 to 459.95358, inclusive, within 10 days after bringing the substance on-site or before June 21, 1999; or

(2) Pursuant to NAC 459.95448 to 459.95466, inclusive, at the start of the process if the process is started after June 21, 1999.

4. If a facility is subject to the provisions of paragraph (b) of subsection 1 of NAC 459.95323, the owner or operator shall submit the registration pursuant to NAC 459.95348 to 459.95358, inclusive, not later than 90 days after the provisions of paragraph (b) of subsection 1 of NAC 459.95323 take effect.

5. If the state environmental commission adds a new substance to the table of substances set forth in NAC 459.9533 and a facility has a process that uses the new substance, the owner or operator shall, not later than 90 days after the effective date of the regulation which contains the addition, submit to the division registration for the process pursuant to NAC 459.95348 to 459.95358, inclusive.

6. Registration consists of:

(a) Information about the facility as set forth in NAC 459.9535;

(b) A summary of the off-site consequence analysis as set forth in NAC 459.95352;

(c) A summary of the 5-year accident history of the facility as set forth in NAC 459.95354;

(d) A description of the emergency response plan for the facility as set forth in NAC 459.95356; and

(e) Certification as set forth in NAC 459.95358.

7. Annual submission of registration pursuant to NAC 459.95348 to 459.95358, inclusive, satisfies the requirements of subsection 1 of NRS 459.3828 and NRS 459.383.

(Added to NAC by Environmental Comm'n by R121-98, 5-27-99, eff. 6-21-99)

NAC 459.9535 Information concerning facility. (NRS 459.3818, 459.3833)

Information about the facility on the annual registration form must include:

1. The name, street, city, county, state, zip code, latitude and longitude of the facility, the method for obtaining the latitude and longitude, and a description of the location that the latitude and longitude represent;
2. The Dun & Bradstreet number for the facility;
3. The name and Dun & Bradstreet number of any parent corporation;
4. The name, telephone number and mailing address of the owner or operator;
5. The name and title of the person with overall responsibility for the implementation of C.A.P.P.;
6. The name, title, telephone number during normal business hours and telephone number that is available 24 hours per day of an emergency contact;
7. For each process:
 - (a) The name and C.A.S. number of each substance;
 - (b) The maximum quantity of each substance on-site between June 1 of the previous year and May 30 of the current year;
 - (c) The N.A.I.S.C. code that is applicable to the process;
 - (d) The program tier to which the process is subject; and
 - (e) The tier B program level, if applicable, of the process;
8. The identifier that the United States Environmental Protection Agency has assigned to the facility;
9. The number of full-time employees at the facility;
10. Whether the facility is subject to 29 C.F.R. § 1910.119;
11. Whether the facility is subject to 40 C.F.R. Part 355;
12. Whether the facility has an operating permit pursuant to 40 C.F.R. Part 70 and, if applicable, the permit number; and
13. The date of the last safety inspection of the facility by a federal, state or local governmental agency and the identity of the inspecting entity.

(Added to NAC by Environmental Comm'n by R121-98, 5-27-99, eff. 6-21-99)

NAC 459.95352 Summary of off-site consequence analysis. (NRS 459.3818, 459.3833) The summary of the off-site consequence analysis on the annual registration form must include:

1. A summary of:

(a) One worst-case release scenario for each tier B program level 1 process; and

(b) For each process that is subject to either the tier A program or tier B program level 2 or 3, one worst-case release scenario for all toxic substances held above the threshold quantity and one worst-case release scenario for all flammable and explosive substances held above the threshold quantity. If an additional worst-case scenario for a toxic or flammable substance is required pursuant to NAC 459.95366, the owner or operator shall submit the same information for the additional scenario that he sends to satisfy the requirements of this paragraph.

2. The following data for each release scenario:

(a) The chemical name of the substances;

(b) A description of the scenario, including, without limitation, whether the scenario involves an explosion, fire, toxic gas release, or liquid spill and vaporization;

(c) The quantity in pounds of the substance that is released;

(d) The rate at which the substance is released;

(e) The duration of the release;

(f) The distance to the endpoint;

(g) Public and environmental receptors that are located within the distance to the endpoint;

(h) Any passive mitigation that is considered;

(i) If the substance is toxic:

(1) The percentage weight of the substance in a mixture;

(2) The physical state of the substance;

(3) The wind speed and atmospheric stability class used in the scenario; and

(4) The topography of the geographical area used in the scenario; and

(j) The basis of the results of the scenario, including, without limitation, the name of any model that is used.

(Added to NAC by Environmental Comm'n by R121-98, 5-27-99, eff. 6-21-99)

NAC 459.95354 Summary of 5-year accident history. (NRS 459.3818, 459.3833) The summary of the 5-year accident history of the facility on the annual registration form must include:

1. The data for the 5-year accident history that is developed pursuant to NAC 459.95378; and

2. A description of:

(a) Any unanticipated or unusual event at the facility that resulted in the release of any quantity of a tier A or tier B substance; and

(b) The efforts undertaken by the facility to assess the reasons and develop a remedy for the release of the substance.

(Added to NAC by Environmental Comm'n by R121-98, 5-27-99, eff. 6-21-99)

NAC 459.95356 Description of emergency response plan. (NRS 459.3818, 459.3833)
The description of the emergency response plan for the facility on the annual registration form must indicate:

1. Whether there is a written emergency response plan;
 2. Whether the plan includes specific actions to be taken in response to an accidental release of a tier A or tier B substance;
 3. Whether the plan includes procedures for informing the public and local agencies responsible for responding to accidental releases;
 4. Whether the plan includes information on emergency health care;
 5. The date of the most recent review or update of the emergency response plan;
 6. The date of the most recent emergency response training for employees;
 7. The name and telephone number of the local agency with which the plan is coordinated;
- and
8. Other federal or state requirements for the emergency plan to which the facility is subject.

(Added to NAC by Environmental Comm'n by R121-98, 5-27-99, eff. 6-21-99)

NAC 459.95358 Certification. (NRS 459.3818, 459.3833)

1. If a registration form submitted pursuant to NAC 459.95348 to 459.95356, inclusive, only reflects processes that are subject to the tier B program level 1, the owner or operator shall include with the registration a certification in substantially the following form:

Based on the criteria set forth in subsection 2 of NAC 459.95327, the distance to the specified endpoint for the worst-case accidental release scenario for the following process(es) is less than the distance to the nearest public receptor: [list process(es)].

Within the past 5 years, the process(es) has (have) had no accidental release that caused on-site or off-site impacts.

No additional measures are necessary to prevent off-site impacts caused by accidental releases.

In the event of a fire, explosion or release of a tier A or tier B substance from the process(es), entry within the distance to the specified endpoints may pose a danger to public emergency responders. Therefore, public emergency responders should not enter this area except as arranged with the emergency contact indicated in the assessment report.

The undersigned certifies that, to the best of my knowledge, information and belief, formed after reasonable inquiry, the information submitted is true, accurate and complete.

[Signature, title, date signed]

2. If a registration form submitted pursuant to NAC 459.95348 to 459.95356, inclusive, does not reflect only processes that are subject to tier B program level 1, the certification must substantially conform to one of the following forms:

(a) I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information.

[Signature, title, date signed]

(b) I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attached documents and that, based on my inquiry of the natural persons immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false information.

[Signature, title, date signed]

3. The certification must be signed by the sole proprietor of the facility, the highest ranking corporate officer of the facility, a partner at the facility, the manager of the facility or a person designated by one of those persons to sign the certification.

(Added to NAC by Environmental Comm'n by R121-98, 5-27-99, eff. 6-21-99)

Hazard Assessments

NAC 459.95362 Applicability. (NRS 459.3818, 459.3833)

1. If all facility processes are subject to the tier A program or tier B program level 2 or 3, the owner or operator shall conduct a hazard assessment pursuant to NAC 459.95362 to 459.95378, inclusive.

2. If a process is subject to tier B program level 1, the owner or operator shall conduct a hazard assessment pursuant to NAC 459.95364, 459.95366 and 459.9537 to 459.95378, inclusive.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95364 Parameters for analysis of off-site consequences. (NRS 459.3818, 459.3833)

1. An owner or operator shall use the following endpoints when preparing an analysis of off-site consequences:

(a) For toxic substances, the toxic endpoints provided pursuant to NAC 459.9533;

(b) For flammables and explosives:

(1) In a scenario that studies the potential effects of an explosion, an overpressure of 1 psi (0.0703 kilograms per square centimeter);

(2) In a scenario that studies radiant heat and exposure time, a radiant heat of 5 kw/m² (1586 BTU per hour per square foot) for 40 seconds; or

(3) In a scenario that studies the lower flammability limit, the lower flammability limit provided by the N.F.P.A. or other generally recognized sources; or

(c) If an endpoint is not provided pursuant to NAC 459.9533 or a substance is not designated as toxic, flammable or explosive pursuant to NAC 459.9533, the owner or operator shall define an appropriate endpoint. The owner or operator shall define a toxic endpoint in a manner that is comparable to the health impacts defined by ERPG-2 of the Emergency Response Planning Guidelines Series, which is adopted by reference pursuant to NAC 459.95528, and shall define a flammable or explosive endpoint as set forth in paragraph (b).

2. The owner or operator shall use a wind speed of 1.5 meters per second (4.9 feet per second) and an atmospheric stability class of F when preparing the worst-case release analysis, except that, if the owner or operator demonstrates that local meteorological data show a higher minimum wind speed or less stable atmosphere at all times during the previous 3 years, these minimums may be used. For an analysis of an alternative scenario, the owner or operator shall use the typical meteorological conditions.

3. Except as otherwise provided in this subsection, the owner or operator shall use the highest daily maximum temperature during the previous 3 years and the average humidity for the site based on temperature and humidity data gathered on-site or at a local meteorological station for a worst-case release analysis involving a tier A or tier B toxic substance. A facility using the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528, may use 25° C (77° F) and 50 percent humidity as values for these variables. For an analysis of an alternative scenario, the owner or operator may use typical temperature and humidity data gathered on-site or at a local meteorological station.

4. The owner or operator shall analyze:

(a) A worst-case release of a tier A or tier B toxic substance assuming a ground level (0 feet) release.

(b) An alternative scenario involving a tier A or tier B toxic substance using the release height that is determined by the release scenario.

5. The owner or operator shall use urban or rural topography for a worst-case release scenario or an alternative scenario, as appropriate. An urban topography has many obstacles, such as buildings and trees, in the immediate area. A rural topography has no buildings in the immediate area, and the terrain is generally flat and unobstructed.

6. The owner or operator shall ensure that any table or model used for a dispersion analysis of a tier A or tier B toxic substance appropriately accounts for gas density.

7. For a worst-case release analysis, the owner or operator shall assume that a liquid other than a gas which is liquefied by refrigeration only is released at the highest daily maximum temperature based on data for the previous 3 years appropriate for the facility, or at process temperature, whichever is higher. For an alternative scenario, the owner or operator may assume that the substance is released at a process or ambient temperature which is appropriate for the scenario.

8. As used in this section, "typical meteorological conditions" means the temperature, wind speed, cloud cover and atmospheric stability class that prevail at the site based on data gathered at or near the site or from a local meteorological station.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95366 Analysis of worst-case release scenario. (NRS 459.3818, 459.3833)

1. The owner or operator shall include the data gathered from the worst-case release scenario analysis on the registration form required pursuant to NAC 459.95348 and in the assessment report.

2. The facility may use the guidelines set forth in the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528, to calculate any of the values required in this section.

3. The owner or operator shall prepare one worst-case release scenario for each tier B program level 1 process.

4. For each process that is subject to the tier A program or tier B program level 2 or 3, the owner or operator shall prepare:

(a) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint resulting from an accidental release of a tier A or tier B toxic substance under worst-case conditions as described in NAC 459.95364;

(b) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint resulting from an accidental ignition or detonation of a flammable or explosive substance under worst-case release conditions as described in NAC 459.95364; and

(c) Additional worst-case release scenarios for a facility if:

(1) A worst-case release from another process at the facility potentially affects different public receptors than those affected by the worst-case release scenario prepared pursuant to paragraphs (a) and (b); or

(2) A tier B toxic or flammable substance is present in excess of the threshold quantity and was not considered as part of the worst-case release scenarios prepared pursuant to paragraphs (a) and (b).

5. When preparing a worst-case release scenario, the owner or operator shall assume that the release quantity is the greater of:

(a) For substances in a vessel, the greatest amount held in a single vessel, taking into account administrative controls that limit the maximum quantity.

(b) For substances in pipes, the greatest amount in a pipe, taking into account administrative controls that limit the maximum quantity.

6. The owner or operator shall model each tier A or tier B substance as a toxic, flammable or explosive as described in the table in NAC 459.9533. If a substance is not described as toxic, flammable or explosive in the table in NAC 459.9533, the owner or operator shall select the scenario providing the most significant impact on employees and the public.

7. For toxic substances that are normally gases at ambient temperature and handled as a gas or as a liquid under pressure, the owner or operator shall:

(a) Assume that the quantity in the vessel or pipe, as determined pursuant to subsection 5, is released as a gas over a period of 10 minutes;

(b) Assume that the release rate, in pounds per minute, is the total quantity divided by 10, unless passive mitigation systems are in place; and

(c) Calculate the impact of passive mitigation measures on the release rate using the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528.

8. For gases handled as refrigerated liquids at ambient pressure, the owner or operator:

(a) Shall assume that the substance is released as a gas in 10 minutes, if the released substance is not contained by passive mitigation systems or if the contained pool would have a depth of 1 cm (0.39 inch) or less; and

(b) May assume that the quantity of the substance in the vessel or pipe, as determined pursuant to subsection 5, is spilled instantaneously to form a liquid pool, if the released substance is contained by passive mitigation systems in a pool with a depth greater than 1 cm (0.39 inch). The owner or operator shall calculate the volatilization rate at the boiling point of the substance and at the conditions set forth in subsections 9, 10 and 11.

9. For toxic substances that are normally liquids at ambient temperature, the owner or operator shall assume that the quantity in the vessel or pipe, as determined pursuant to subsection 5, is spilled instantaneously to form a liquid pool. The owner or operator shall determine the surface area of the pool by assuming that the liquid spreads to 1 cm (0.39 inch) deep, unless passive mitigation systems are in place that serve to contain the spill and limit the surface area. If passive mitigation is in place, the owner or operator shall use the surface area of the contained liquid to calculate the volatilization rate. If the release would occur onto a surface that is not paved or smooth, the owner or operator may take into account the actual surface characteristics.

10. When determining the volatilization rate for purposes of subsection 9, the owner or operator shall account for:

(a) The highest daily maximum temperature occurring during the past 3 years;

(b) The temperature of the substance in the vessel; and

(c) If the liquid spilled is a mixture or solution, the concentration of the substance.

11. For purposes of subsection 9, the owner or operator shall determine the rate of release to air from the volatilization rate of the liquid pool determined pursuant to subsection 10. The owner or operator may use the methodology set forth in the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528, or another publicly available technique that accounts for the modeling conditions and is recognized in the industry as a current practice. The owner or operator may use a proprietary model that accounts for the modeling conditions if the owner or operator allows the division access to the model and describes to local emergency planners, upon request, the features of the model and any differences from publicly available models.

12. The owner or operator shall assume that the quantity of the flammable substance determined pursuant to subsection 5 vaporizes resulting in a vapor cloud explosion. The owner or operator shall use a yield factor of 10 percent of the available energy released in the explosion to determine the distance to the explosion endpoint if the model used is based on TNT-equivalent methods.

13. For explosive substances, the owner or operator shall employ methods for calculating overpressure based upon generally accepted practices.

14. The owner or operator shall use the parameters defined in NAC 459.95364 to determine the distance to the endpoints. The owner or operator may use the methodology provided in the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528, or any commercially or publicly available technique for air dispersion modeling if the technique accounts for the modeling conditions and is recognized in the industry as a current practice. The owner or operator may use a proprietary model that accounts for the modeling conditions if the owner or operator allows the division access to the model and describes to local emergency planners upon request the features of the model and any differences in the model from publicly available models.

15. The owner or operator may consider passive mitigation systems for the worst-case release scenario analysis if the mitigation system is capable of withstanding the event that triggered the release and still function as intended.

16. Notwithstanding the provisions of subsection 5, the owner or operator shall select as the worst-case scenario for a flammable substance or the worst-case scenario for a tier A or tier B toxic substance a scenario based on proximity to the boundary of the facility and smaller quantities of the substance handled at a higher process temperature or pressure if such a scenario would result in a greater distance to an endpoint beyond the facility boundary than the scenario provided pursuant to subsection 5.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95368 Analysis of alternative release scenario. (NRS 459.3818, 459.3833)

1. The owner or operator shall identify and analyze at least one alternative release scenario for each toxic substance that is used in a process and at least one alternative release scenario to represent all flammable or explosive substances that are used in processes.

2. The facility may use the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528, to calculate any of the values required in this section.

3. For each scenario required pursuant to subsection 1, the owner or operator shall select a scenario that:

(a) Is more likely to occur than the worst-case release scenario developed pursuant to NAC 459.95366; and

(b) Will reach an endpoint off-site. If no alternate release scenario will reach an endpoint off-site, then the owner or operator shall select the alternate release scenario with the most significant on-site impact.

4. The owner or operator shall consider, without limitation and where applicable, scenarios in which:

(a) A transfer hose releases because of splits or sudden uncoupling of the hose;

(b) Process piping releases because of a failure at a flange, joint, weld, valve and valve seal, drain or bleed;

(c) A process vessel or pump releases because of a crack or a failure of a seal, drain, bleed or plug;

(d) A vessel overfills and spills, or overpressurizes and vents through a relief valve or rupture disk; and

(e) A shipping container is mishandled and thereby breaks or is punctured leading to a spill.

5. The owner or operator:

(a) Shall use the appropriate parameters set forth in NAC 459.95364 to determine the distance to the endpoints;

(b) May use:

(1) The methodology provided in the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528; or

(2) A commercially or publicly available technique for air dispersion modeling, if the technique accounts for the specified modeling conditions and is recognized in the industry as a current practice; and

(c) May use a proprietary model that accounts for the modeling conditions if the owner or operator allows the division access to the model and describes to local emergency planners, upon request, the features of the model and any differences from publicly available models.

6. The owner or operator may consider active and passive mitigation systems for an alternative release scenario if the mitigation systems are capable of withstanding the event that triggered the release and still function as intended.

7. When selecting the alternative release scenarios, the owner or operator shall consider, without limitation:

(a) The 5-year accident history provided pursuant to NAC 459.95378; and

(b) The analyses performed pursuant to NAC 459.95388 or 459.95414.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.9537 Defining off-site impacts on population. (NRS 459.3818, 459.3833)

1. The owner or operator shall estimate and include on the registration form and in the assessment report the population within a circle that has its center at the point of the release and a radius that is the equivalent of the distance to the endpoint determined pursuant to NAC 459.95364. The owner or operator shall also note on the registration form and in the assessment report the presence of institutions, such as schools, hospitals, prisons, parks and recreational areas, and major commercial, office and industrial buildings within the circle.

2. The owner or operator may use the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528, to calculate the values required in this section.

3. The owner or operator may use the most recent census data or any other updated information to estimate the population potentially affected.

4. The owner or operator shall estimate the population to two significant digits.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95372 Defining off-site impacts on environment. (NRS 459.3818, 459.3833)

1. The owner or operator shall include on the registration form and in the assessment report the environmental receptors within a circle with its center at the point of the release and a radius that is the equivalent of the distance to the endpoint determined pursuant to NAC 459.95364.

2. The facility may use the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528, to calculate the values required in this section.

3. The owner or operator may rely on information provided on local maps prepared by the United States Geological Survey or on any source containing United States Geological Survey data to identify environmental receptors.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95374 Review and update of off-site consequence analyses; revision of assessment report. (NRS 459.3818, 459.3833)

1. The owner or operator shall review and update the off-site consequence analyses developed pursuant to NAC 459.95364 to 459.95372, inclusive, at least once every 5 years.

2. If there is a change at a facility in a process that involves a substance or the quantity of a substance that is stored or handled at the facility, or if any other change at the facility might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more, the owner or operator shall prepare a revised analysis not later than 6 months after the change and prepare and submit a revised assessment report pursuant to NAC 459.95468.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95376 Documentation to be maintained concerning worst-case release scenarios and alternative release scenarios. (NRS 459.3818, 459.3833) The owner or operator shall maintain at his facility:

1. For worst-case release scenarios:

(a) A description of the vessel or pipeline and substance that the owner or operator selected as worst-case; and

(b) A list of the assumptions and parameters that the owner or operator used, including, without limitation:

(1) A description of any administrative controls and passive mitigation that the owner or operator assumed to limit the quantity of the substance which would be released;

(2) The anticipated effect of the controls and mitigation on the release quantity and rate; and

(3) The reasons why the owner or operator selected these assumptions and parameters.

2. For alternative release scenarios:

(a) A description of the scenarios that the owner or operator identified; and

(b) A list of the assumptions and parameters that the owner or operator used, including, without limitation:

(1) A description of any administrative controls and active or passive mitigation that the owner or operator assumed to limit the quantity of the substance which would be released;

(2) The anticipated effect of the controls and mitigation on the release quantity and rate; and

(3) The reasons why the owner or operator selected these assumptions and parameters.

3. For worst-case scenarios and alternative release scenarios:

(a) Documentation of:

(1) The estimated quantity released, release rate and duration of release;

(2) The methodology that the owner or operator used to determine the distance to the endpoints; and

(3) The data that the owner or operator used to estimate the population and environmental receptors which potentially will be affected; and

(b) Verification that the active and passive mitigation systems are designed to remain functional under the conditions of the release scenarios.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95378 Five-year accident history. (NRS 459.3818, 459.3833)

1. The owner or operator shall include in the 5-year accident history all accidental releases from processes that resulted in:

- (a) A death, injury or significant property damage on-site; or
- (b) A known death, injury, evacuation, sheltering, property damage or environmental damage off-site.

2. For each accidental release that the owner or operator includes in the 5-year accident history pursuant to subsection 1, the owner or operator shall report:

- (a) The date, time and approximate duration of the release;
- (b) The name of each chemical that was released;
- (c) The estimated quantity of each chemical that was released in pounds;
- (d) For a mixture of toxic substances, the percentage concentration by weight of the released substance in the mixture;
- (e) The applicable N.A.I.C.S. code for the process;
- (f) The type of release event and its source;
- (g) The weather conditions, if known;
- (h) Any on-site impacts;
- (i) Any known off-site impacts;
- (j) The initiating event and other contributing factors, if known;
- (k) Whether off-site responders were notified, if known; and
- (l) The changes in the operations or processes at the facility that resulted from investigation of the release.

3. The owner or operator shall provide any numerical estimates to at least two significant digits.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

General Requirements for Prevention Programs

NAC 459.95382 General requirements. (NRS 459.3818, 459.3833)

1. The owner or operator of a facility with a process that is subject to tier B program level 1 but not subject to the tier A program is not required to implement a prevention program for that process.

2. The owner or operator of a facility with a process that is subject to the tier A program or tier B program level 3 is required to implement a prevention program pursuant to NAC 459.95412 to 459.95435, inclusive, for that process.

3. The owner or operator of a facility with a process that is subject to tier B program level 2 but not subject to the tier A program shall implement a prevention program for that process pursuant to:

(a) NAC 459.95386 to 459.95398, inclusive; or

(b) NAC 459.95412 to 459.95435, inclusive.

4. The owner or operator shall be in compliance with all applicable requirements for the prevention program at the time he submits the assessment report pursuant to NAC 459.9545.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Requirements for Prevention Programs, Tier B Program Level 2

NAC 459.95386 Safety information; compliance with good engineering practices. (NRS 459.3818, 459.3833) Except as otherwise provided in paragraph (b) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to tier B program level 2 shall:

1. Compile and maintain the following current safety information related to the tier B program level 2 substances, processes and equipment:

(a) Material safety data sheets which satisfy the requirements of 29 C.F.R. § 1910.1200(g);

(b) The maximum intended inventory of equipment in which the substances are stored or processed;

(c) The safe upper and lower temperatures, pressures, flows and compositions;

(d) The specifications of the equipment; and

(e) The codes and standards used to design, build and operate the process.

2. Ensure that the process is designed in compliance with recognized and generally accepted good engineering practices. Compliance with such engineering practices may include, without limitation, compliance with:

(a) Federal or state regulations which address industry-specific safe design; or

(b) Industry-specific design codes and standards.

3. Update the safety information if a major change occurs which makes the information inaccurate.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95388 Hazard review. (NRS 459.3818, 459.3833) Except as otherwise provided in paragraph (b) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to tier B program level 2:

1. Shall conduct a hazard review associated with tier B program level 2 substances, processes and procedures which identifies:

(a) The specific hazards that are associated with the substance, process or procedure;

(b) Opportunities for equipment malfunctions or human errors that could cause an accidental release;

(c) The safeguards that are used or needed to control the hazards or prevent equipment malfunction or human error; and

(d) Any steps used or needed to detect or monitor releases;

2. May use checklists developed by persons or organizations which are knowledgeable about the process and equipment as a guide to conducting the review;

3. Shall consider previous incidents as described in NAC 459.95378 for the hazard review;

4. Shall, for a process that is designed to meet industry standards or federal or state rules of design, inspect all equipment to determine whether the process is designed, fabricated and operated in accordance with the applicable standards or rules;

5. Shall document the results of the hazard review and ensure that any problem which is identified is resolved in a timely manner;

6. Shall schedule the resolution of any recommendation in the P.T.A.H. pursuant to NAC 459.95452;

7. Shall update the review at least once every 5 years;

8. Shall conduct a review whenever a major change in a process occurs; and

9. Shall update and revalidate the review pursuant to NAC 459.9549 to 459.955, inclusive.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.9539 Operating procedures. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in paragraph (b) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to tier B program level 2:

(a) Shall prepare written operating procedures which provide clear instructions or steps for safely conducting activities associated with a process and which are consistent with the safety information for that process.

(b) May use operating procedures or instructions which are:

(1) Provided by the manufacturers of the equipment; or

(2) Developed by a person or organization that is knowledgeable about the process and equipment.

2. The procedures must include, without limitation, a description of:

(a) Initial startup;

(b) Normal operations;

(c) Temporary operations;

(d) Emergency shutdown and operations;

(e) Normal shutdown;

(f) Startup following a normal or emergency shutdown or a major change which requires a hazard review;

(g) Consequences of deviations and steps required to correct or avoid deviations; and

(h) Equipment inspections.

3. The owner or operator shall ensure that the operating procedures are updated, if necessary, whenever a major change occurs and before the startup of the changed process.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95392 Training procedures. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in subsection 2 or paragraph (b) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to tier B program level 2 shall ensure that each employee who operates or will operate a process has been trained or tested and determined competent in the relevant operating procedures developed pursuant to NAC 459.9539.

2. The owner or operator may certify in writing that an employee who is already operating a process on June 21, 1999, has the required knowledge, skills and abilities to carry out the duties and responsibilities of operating a process set forth in the operating procedures developed pursuant to NAC 459.9539.

3. The owner or operator shall provide an employee who operates a process with refresher training at least once every 3 years, and more often if it is determined after consultation with the employees who operate the process to be necessary, to ensure that the employee understands and adheres to the current operating procedures of the process.

4. The owner or operator may satisfy the requirements of this section by using training that is conducted:

(a) Pursuant to federal or state regulations;

(b) Pursuant to industry-specific standards or codes; or

(c) By vendors of the equipment used in a process,

if the training satisfies the requirements of this section.

5. The owner or operator shall ensure that an operator is trained in any updated or new procedure before the startup of a process after a major change.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95394 Procedures for maintenance of equipment. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in paragraph (b) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to tier B program level 2 shall prepare and implement procedures to maintain the ongoing mechanical integrity of the equipment used for a process.

2. The owner or operator may use as the basis for maintenance procedures instructions that are provided:

- (a) Pursuant to federal or state regulations;
- (b) Pursuant to industry-specific standards or codes; or
- (c) By vendors of the equipment used in a process.

3. The owner or operator shall train or cause to be trained each employee involved in maintaining the ongoing mechanical integrity of a process, including, without limitation, training in:

- (a) The hazards of the process;
- (b) How to avoid or correct unsafe conditions; and
- (c) The procedures applicable to the tasks related to the job of the employee.

4. A maintenance contractor shall ensure that an employee who performs a maintenance procedure on equipment which is used in a process is trained to perform the procedure using the procedures developed pursuant to subsections 1 and 2.

5. The owner or operator shall:

(a) Perform or cause to be performed inspections and tests on equipment that is used in a process at a frequency consistent with:

- (1) Recommendations from the manufacturer;
- (2) Standards or codes of the industry;
- (3) Good engineering practices; and
- (4) Previous experience.

(b) Ensure that the procedures for inspection and testing adhere to recognized and generally accepted good engineering practices.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95396 Verification of compliance; documentation. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in paragraph (b) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to tier B program level 2 shall, at least once every 3 years, certify that he has verified that his facility is in compliance with the provisions of NAC 459.95386 to 459.95398, inclusive.

2. Verification must be conducted by at least one person who is knowledgeable in the process.

3. The owner or operator shall:

(a) Prepare a report of the findings;

(b) Promptly determine and document an appropriate response to each finding of the report;

(c) Document that he has corrected any deficiency; and

(d) Maintain at the facility the two most recent reports of compliance, except that the owner or operator does not need to maintain a report of compliance for more than 5 years.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95398 Investigation of incidents. (NRS 459.3818, 459.3833) Except as otherwise provided in paragraph (b) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to tier B program level 2 shall:

1. Investigate any incident which resulted in, or could reasonably have resulted in, a catastrophic release of a substance;

2. Initiate investigation of the incident as promptly as possible, but not later than 48 hours after the incident;

3. Prepare a summary at the conclusion of the investigation which includes at a minimum:

(a) The date of the incident;

(b) The date the investigation of the incident began;

(c) A description of the incident;

(d) The factors which contributed to the incident; and

(e) Recommendations resulting from the investigation;

4. Promptly address and resolve the findings and recommendations of the investigation;

5. Document resolutions and corrective actions;

6. Review the findings with the personnel whose job tasks are affected by the findings; and

7. Retain a summary of the investigation for at least 5 years.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

**Requirements for Prevention Programs, Tier A Program and
Tier B Program Levels 2 and 3**

NAC 459.95412 Information concerning process safety. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, pursuant to the schedule set forth in NAC 459.95414, the owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3 shall compile written information concerning process safety before conducting a process hazard analysis required pursuant to NAC 459.95414.

2. The information concerning process safety must include, without limitation, information pertaining to:

(a) The hazards of the tier A or tier B substances, including, without limitation:

- (1) Toxicity information;
- (2) Permissible exposure limits;
- (3) Physical data;
- (4) Reactivity data;
- (5) Corrosivity data;
- (6) Thermal and chemical stability data; and
- (7) The foreseeable hazardous effects of inadvertent mixing of different materials.

Material safety data sheets that satisfy the requirements of 29 C.F.R. § 1910.1200(g) may be used to comply with this requirement to the extent they contain the information required by this paragraph.

(b) The technology of the process, including, without limitation:

- (1) A block flow diagram or simplified process flow diagram;
- (2) The process chemistry;
- (3) The maximum intended inventory;
- (4) The safe upper and lower limits for any applicable process variable, including, without limitation, temperature, pressure, flow and composition; and
- (5) An evaluation of the consequences of deviations.

If the original technical information no longer exists, such information may be developed in conjunction with the process hazard analysis in sufficient detail to support the analysis.

(c) The equipment in the process, including, without limitation:

- (1) The materials of construction;

- (2) Piping and instrument diagrams;
 - (3) Electrical classification;
 - (4) The design of the relief system and the basis for the design;
 - (5) The design of the ventilation system;
 - (6) Design codes and standards that were employed;
 - (7) The material and energy balances for processes that were built after May 26, 1992;
- and
- (8) The safety systems, such as interlocks, detection or suppression systems.

3. The owner or operator shall evaluate processes and equipment for conformance to applicable codes, standards and good engineering practices and document that the processes and equipment comply with recognized and generally accepted good engineering practices.

4. For existing processes and equipment designed and constructed in accordance with codes, standards or practices that are no longer in general use, the owner or operator shall determine and document that the equipment is designed, maintained, inspected, tested and operating in a safe manner.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95414 Process hazard analysis. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, the owner or operator shall perform an initial process hazard analysis on a process that is subject to the tier A program or tier B program level 2 or 3.

2. The owner or operator shall conduct the initial process hazard analysis by June 21, 1999, or before submission of the assessment report pursuant to NAC 459.9545, whichever is later.

3. An owner or operator may use a process hazard analysis that was previously completed to comply with NRS 459.380 to 459.3874, inclusive, or 29 C.F.R. § 1910.119(e) to satisfy the requirement to perform an initial process hazard analysis.

4. The owner or operator shall obtain the approval of the division concerning the methodology of the process hazard analysis before conducting the analysis.

5. The owner or operator shall select one or more of the following methodologies as required by the complexity of the process:

- (a) A "what if" analysis;
- (b) A checklist;
- (c) A "what if" analysis combined with a checklist;
- (d) A hazard and operability study;

- (e) A failure mode and effects analysis;
- (f) A fault tree analysis; or
- (g) An appropriate equivalent methodology.

6. When preparing a process hazard analysis, an owner or operator shall consider:

- (a) The hazards of the process;
- (b) Any previous incident that had a likely potential for catastrophic consequences, including, without limitation, near misses or accidental releases as described in NAC 459.95378;
- (c) The engineering and administrative controls that are applicable to the hazards and their interrelationships, including, without limitation, the appropriate application of detection methodologies such as process monitoring, control instrumentation with alarms or detection hardware;
- (d) The consequences of a failure of engineering and administrative controls;
- (e) The siting of the facility;
- (f) The human factors; and
- (g) A qualitative evaluation of a range of the possible safety and health effects of a failure of controls.

7. If not evaluated as part of the process hazard analysis pursuant to subsections 1 to 6, inclusive, a separate, dedicated hazard analysis, utilizing a checklist or other appropriate method, must be conducted to evaluate:

- (a) Human factors;
- (b) Facility siting; and
- (c) External forces.

8. The owner or operator of a facility with a process that is subject to:

- (a) The tier A program shall conduct the process hazard analysis with a team:
 - (1) With expertise in engineering and process operations; and
 - (2) That satisfies for the process in question the requirements of NAC 459.95472, 459.95474 and 459.95476.
- (b) Tier B program level 2 or 3, but not the tier A program, shall conduct the process hazard analysis with a team:
 - (1) With expertise in engineering and process operations; and
 - (2) That includes at least:

(I) One member who has experience and knowledge specific to the process being evaluated; and

(II) One member who is knowledgeable in the methodology for the specific process hazard analysis being used.

9. The owner or operator shall:

(a) Promptly evaluate the findings and recommendations of the assessment team;

(b) Determine and document a course of action based on the evaluation;

(c) Develop a written schedule of when the actions are to be completed;

(d) Complete the actions as soon as possible;

(e) Communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions; and

(f) Schedule the resolution of all recommendations in the P.T.A.H. pursuant to NAC 459.95452.

10. At least once every 5 years after the completion of the initial process hazard analysis, a team that satisfies the requirements of subsection 8 shall update and revalidate the process hazard analysis to ensure that the process hazard analysis is consistent with the current process.

11. A process hazard analysis must be updated and revalidated pursuant to the procedures set forth in NAC 459.9549 to 459.955, inclusive.

12. An owner or operator shall retain a process hazard analysis and an update or revalidation for each process subject to this section, as well as any documented resolution of recommendations described in subsection 9, for the life of the process.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95416 Operating procedures. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3 shall develop and implement written operating procedures for that process which:

(a) Are consistent with the process safety information developed pursuant to NAC 459.95412; and

(b) Provide clear instructions for safely conducting such a process.

2. The operating procedures must include:

(a) Steps for each operating phase, including, without limitation, steps for:

(1) The initial startup;

(2) Normal operations;

- (3) Temporary operations;
 - (4) An emergency shutdown, including, without limitation, a description of the conditions under which an emergency shutdown is required and the assignment of responsibility for a shutdown to a qualified operator;
 - (5) Emergency operations;
 - (6) A normal shutdown; and
 - (7) Startup following a turnaround or an emergency shutdown.
- (b) Operating limits, including, without limitation:
- (1) The consequences of a deviation; and
 - (2) The steps required to correct or avoid a deviation.
- (c) Safety and health considerations, including, without limitation:
- (1) The properties of, and hazards presented by, the chemicals used in the process;
 - (2) The precautions that are necessary to prevent exposure, including, without limitation, engineering controls, administrative controls and personal protective equipment;
 - (3) Control measures to be taken if physical contact or airborne exposure occurs;
 - (4) Quality control for raw materials;
 - (5) Control of hazardous chemical inventory levels; and
 - (6) Any special or unique hazards.
- (d) A description of the safety systems and their functions.
3. The owner or operator shall:
- (a) Ensure that the operating procedures are readily accessible to employees who work in or maintain an applicable process;
 - (b) Review the operating procedures as often as necessary to ensure that they reflect current operating practice, including, without limitation, any change to a process that may result from a change in process chemicals, technology or equipment;
 - (c) Certify annually that the operating procedures are current and accurate; and
 - (d) Develop and implement safe work practices for employees and contractors to provide for the control of:
 - (1) Hazards during a lockout or tagout;
 - (2) Hazards during a confined space entry;

(3) Hazards while opening the equipment or piping associated with a process;
(4) Entrance into the facility by maintenance, contractor, laboratory or other support personnel; and

(5) Any other hazards that may be encountered.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95418 Training procedures. (NRS 459.3818, 459.3833) Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3:

1. Shall, except as otherwise provided in subsection 2, ensure that each employee who is operating a process or will operate a process is trained in an overview of the process and in the operating procedures created pursuant to NAC 459.95416. Such training must include, without limitation, training in:

- (a) The layout of the plant;
- (b) The location of equipment and instruments;
- (c) The specific safety and health hazards;
- (d) Emergency operations, including, without limitation, procedures for an emergency shutdown; and
- (e) Safe work practices that are applicable to the job tasks of the employee.

2. May, in lieu of providing the training required pursuant to subsection 1, certify in writing that an employee who was operating a process on May 26, 1992, possesses the required knowledge, skills and abilities to safely carry out the duties and responsibilities as specified in the operating procedures.

3. Shall provide an employee with refresher training at least once every 3 years, and more often if it is determined after consultation with the employees who operate the process to be necessary, to ensure that the employee understands and adheres to the current operating procedures of the process.

4. May provide employees with any combination of classroom and field training, including, without limitation, on-the-job training. Training must, at a minimum, follow a predefined syllabus or checklist to ensure that each employee receives training which is essential to his job performance. On-the-job training, if it is the only method employed, does not satisfy the requirements of this subsection unless it follows a predefined syllabus or checklist.

5. Shall ascertain that each employee who operates a process has received and understood the training required pursuant to this section.

6. Shall prepare records that include, without limitation:

- (a) The identity of the employee;

- (b) The date of training;
- (c) The substance of the training provided on that date; and
- (d) The means used to verify that the employee understood the training.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95421 Procedures for maintenance of equipment. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process subject to the tier A program or tier B program level 2 or 3 shall:

(a) Establish and implement written procedures to ensure the ongoing integrity of the equipment listed in subsection 2;

(b) Provide each employee who is involved in maintaining the ongoing integrity of the equipment listed in subsection 2 with:

(1) An overview of the process that uses the equipment and the potential hazards of the process; and

(2) Training in the procedures that are applicable to the job tasks of the employee to ensure that the employee can perform the job tasks in a safe manner;

(c) Perform inspections and tests on process equipment listed in subsection 2;

(d) Ensure that the procedures for inspection and testing follow recognized and generally accepted good engineering practices;

(e) Ensure that the inspections and tests of the equipment are performed:

(1) In the frequency required by good engineering practices and consistent with any applicable recommendations from the manufacturer of the equipment; or

(2) More frequently if determined to be necessary by previous experience in operating the equipment;

(f) Document each inspection and test that has been performed on the equipment, including, without limitation, documentation of:

(1) The date of the inspection or test;

(2) The name of the person who performed the inspection or test;

(3) The serial number or other identifier of the equipment on which the inspection or test was performed;

(4) A description of the inspection or test performed; and

(5) The results of the inspection or test;

(g) Correct any deficiencies in the equipment that are outside the acceptable limits which are described by the process safety information developed pursuant to NAC 459.95412 before using the equipment again;

(h) In the construction of new processes and equipment, ensure that the equipment, as fabricated, is suitable for the process for which it will be used;

(i) Perform appropriate checks and inspections to ensure that equipment is installed properly and consistent with design specifications and instructions from the manufacturer; and

(j) Ensure that maintenance materials, spare parts and equipment are suitable for the process for which they will be used.

2. This section applies to:

(a) Pressure vessels and storage tanks;

(b) Piping systems, including, without limitation, piping components such as valves;

(c) Relief and vent systems and devices;

(d) Emergency shutdown systems;

(e) Controls, including, without limitation, monitoring devices and sensors, alarms and interlocks; and

(f) Rotating equipment.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95423 Procedures for management of change in process. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3 shall:

(a) Establish and implement written procedures to manage changes, other than a replacement in kind, to:

(1) Chemicals, technology, equipment and procedures that are used in a process; and

(2) A process that is subject to the tier A program or tier B program level 2 or 3;

(b) Ensure that the procedures established pursuant to paragraph (a) require that the following considerations are addressed before one of the changes listed in paragraph (a) occurs:

(1) The technical basis for the proposed change;

(2) The impact of change on safety and health;

(3) Whether any modifications to operating procedures will be necessary;

(4) The time necessary to make the proposed change; and

(5) The requirements for authorization for the elements of the proposed change;

(c) Inform and train for the change any employee who is involved in the operation of the process that is affected by the change and any maintenance or contract employee whose job tasks will be affected by the change before the startup of the process or of the affected part of the process; and

(d) Update:

(1) The process safety information required pursuant to NAC 459.95412; and

(2) The operating procedures or practices required pursuant to NAC 459.416.

2. As used in this section, "replacement in kind" means a replacement of equipment, instruments, procedures, raw material and processing conditions that satisfy the design specifications.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95425 Pre-startup safety review. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3 shall perform a pre-startup safety review for new facilities and for modified facilities when the modification is significant enough to require a change in the process safety information.

2. A pre-startup safety review must confirm that before a substance is introduced into a process:

(a) Construction and equipment is in accordance with design specifications;

(b) Safety, operating, maintenance and emergency procedures are in place and are adequate;

(c) For new or modified facilities, a process hazard analysis has been performed and recommendations have been resolved or implemented before startup;

(d) Modified facilities meet the requirements concerning the management of changes set forth in NAC 459.95423; and

(e) Training of each employee involved in operating the process has been completed.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95427 Verification of compliance; documentation. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3 shall:

(a) Certify at least once every 3 years that an evaluation has been performed of whether adequate procedures and practices as required pursuant to NAC 459.95412 to 459.95435, inclusive, have been developed and implemented;

- (b) Create a report of the findings of the evaluation made pursuant to paragraph (a);
 - (c) Promptly determine and document an appropriate response to any deficiency that is discovered during the evaluation;
 - (d) Document that any deficiency discovered during the evaluation has been corrected; and
 - (e) Retain the two most recent reports.
2. The evaluation must be conducted by at least one person who is knowledgeable in the process.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95429 Investigation of incidents. (NRS 459.3818, 459.3833) Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3 shall:

1. Investigate any incident that resulted in, or could reasonably have resulted in, a catastrophic release of a substance;
2. Initiate the investigation of the incident as promptly as possible, but not later than 48 hours after the incident;
3. Establish a team to investigate the incident that consists of:
 - (a) At least one person who is knowledgeable in the process involved, including, without limitation, a contract employee if his work was involved in the incident; and
 - (b) Any other person who possesses appropriate knowledge and experience to investigate and analyze the incident thoroughly;
4. Prepare an incident report at the conclusion of the investigation which must include, at a minimum:
 - (a) The date of the incident;
 - (b) The date the investigation of the incident began;
 - (c) A description of the incident;
 - (d) The factors that contributed to the incident; and
 - (e) Recommendations resulting from the investigation;
5. Establish a system to address and resolve the findings and recommendations of the incident report promptly;
6. Document any solutions and corrective actions taken;
7. Ensure that the incident report is reviewed with all affected personnel whose job tasks are relevant to the findings of the incident report, including, without limitation, contract employees where applicable; and

8. Retain the incident report for 5 years.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95431 Employee participation. (NRS 459.3818, 459.3833) Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3 shall:

1. Develop a written plan of action regarding the implementation of the employee participation required by this section;

2. Consult with employees and their representatives about:

(a) Conducting and developing process hazard analyses; and

(b) Developing and implementing the other requirements of NAC 459.95412 to 459.95435, inclusive; and

3. Provide to employees and their representatives access to process hazard analyses and other information which is developed pursuant to NAC 459.95412 to 459.95435, inclusive.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95433 Hot work permit. (NRS 459.3818, 459.3833) Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3 shall:

1. Issue a hot work permit for hot work conducted on or near a process;

2. Document in the permit:

(a) That the fire prevention and protection requirements in 29 C.F.R. § 1910.252(a) are implemented before beginning hot work;

(b) The dates which are authorized for hot work; and

(c) The object on which hot work is to be performed; and

3. Keep the permit on file until completion of the hot work.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95435 Duties of owner or operator concerning contractors; duties of contractors. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3 shall:

(a) When selecting a contractor, obtain and evaluate information regarding the safety performance and programs of the contractor;

(b) Inform the contractor of known potential fire, explosion or toxic release hazards related to the work of the contractor and to the process on which he working;

(c) Explain to the contractor the applicable provisions of NAC 459.9544 and 459.95442;

(d) Develop and implement safe work practices consistent with NAC 459.95416; and

(e) Periodically evaluate the performance of the contractor in satisfying the requirements of subsection 2.

2. The contractor shall:

(a) Ensure that each of his employees who will work on the process is trained in the work practices necessary to perform his job safely;

(b) Ensure that each of his employees who will work on the process is instructed in:

(1) The known potential fire, explosion or toxic release hazards related to his job and the process on which he is working; and

(2) The applicable provisions of the emergency action plan;

(c) Document that each of his employees who will work on the process has received and understood the training required pursuant to this subsection;

(d) Prepare a record that contains:

(1) The identity of the employee;

(2) The date of training; and

(3) The means used to verify that the employee understood the training;

(e) Ensure that each of his employees who works on the process follows the safety rules of the facility, including, without limitation, the safe work practices required pursuant to NAC 459.95416; and

(f) Advise the owner or operator of any unique hazards presented by or found during the work of an employee.

3. This section:

(a) Applies to contractors who perform maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a process.

(b) Does not apply to contractors who provide incidental services that do not influence process safety, including, without limitation, janitorial work, food and drink services, laundry, delivery or other supply services.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Emergency Response Programs

NAC 459.9544 Applicability; compliance. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in subsection 2, the owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3 shall comply with the requirements of NAC 459.95442.

2. The owner or operator of a facility in which the employees will not respond to an accidental release of a tier A or tier B substance is not required to comply with the provisions of NAC 459.95442 if:

(a) For facilities subject to 29 C.F.R. § 1910, the facility has implemented an emergency action plan that contains the elements set forth in 29 C.F.R. § 1910.38(a);

(b) Appropriate mechanisms are in place to notify emergency responders when there is a need for a response;

(c) For facilities with a substance that is subject to 40 C.F.R. Part 355 and has quantities in excess of the threshold planning quantity, the facility is included in the comprehensive emergency response plan developed pursuant to 42 U.S.C. § 11003; and

(d) For facilities to which paragraph (c) does not apply, the facility has coordinated response actions with the local fire department.

3. The owner or operator shall ensure that his facility is in compliance with the applicable provisions of this section or NAC 459.95442 at the time he submits the assessment report pursuant to NAC 459.9545.

4. As used in this section, "threshold planning quantity" has the meaning ascribed to it in 40 C.F.R. Part 355.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95442 Establishment and implementation; review and coordination; written plan. (NRS 459.3818, 459.3833)

1. An owner or operator shall:

(a) Establish and implement an emergency response program to protect employees, public health and the environment, which program must include:

(1) For facilities subject to 29 C.F.R. § 1910, an emergency action plan that contains the elements set forth in 29 C.F.R. § 1910.38(a);

(2) For facilities subject to 29 C.F.R. § 1910, a hazardous materials response program that contains the elements outlined in 29 C.F.R. § 1910.120(q);

(3) Procedures for informing the public and local emergency response agencies about an accidental release;

(4) Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures;

(5) Procedures and measures for emergency response after an accidental release of a tier A or tier B substance;

(6) Procedures for the use, inspection, testing and maintenance of emergency response equipment;

(7) Training for all employees in relevant procedures for emergency response; and

(8) Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the facility and ensure that employees are informed of changes.

(b) Coordinate the emergency response plan with the community emergency response plan developed pursuant to 42 U.S.C. § 11003. Upon request of the local emergency planning committee or emergency response officials, the owner or operator shall promptly provide to the local emergency response officials any information that is necessary for developing and implementing the community emergency response plan.

(c) Review and coordinate the emergency response plan developed pursuant to paragraphs (a) or (b) with local emergency responders.

2. A written plan satisfies the requirements of this section if it:

(a) Complies with other federal contingency plan regulations and the requirements set forth in subsection 1; or

(b) Complies with the requirements set forth in subsection 1 and is consistent with the approach of the National Response Team's Integrated Contingency Plan Guidance set forth in 61 Fed. Reg. 28,642-28,664 and 31,103-31,104 (1996).

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Assessment Reports

NAC 459.95446 Submission of draft for tier A program. (NRS 459.3818) For a process that is subject to the tier A program, the assessment team may submit to the division a draft of the assessment report. Such a draft must be submitted at least 120 days before the final deadline for submittal of the assessment report. The division will provide the leader of the assessment team with written comments on the draft within 60 days after the division receives the draft.

(Added to NAC by Div. of Environmental Protec., eff. 7-10-92; A by Environmental Comm'n by R121-98, 5-27-99)—(Substituted in revision for NAC 459.9534)

NAC 459.95448 Assessment report satisfies requirement for written report of assessment of risk through analysis of hazard. (NRS 459.3818, 459.3833) An owner or operator satisfies the requirement of preparing and submitting to the division a written report of the assessment of a risk through analysis of the hazard pursuant to NRS 459.3846 if he prepares and submits to the division an assessment report pursuant to NAC 459.95448 to 459.95468, inclusive.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.9545 Submission; trade secret or confidential business information. (NRS 459.3818, 459.3833)

1. The owner or operator of a facility in which all processes are subject to the tier A program and no process is subject to the tier B program shall submit for each process to a location that the division specifies an assessment report which contains the elements set forth in NAC 459.95452 to 459.95466, inclusive, pursuant to a schedule that is determined by the division considering the summary of the off-site consequence analysis provided with the registration.

2. The owner or operator of a facility in which all processes are subject to both the tier A program and tier B program shall submit for each process an assessment report that contains the elements set forth in NAC 459.95452 to 459.95466, inclusive. The assessment report must be submitted in a method and format to a location that the division specifies before the latest of:

- (a) June 21, 1999;
- (b) The date on which a substance is first present above a threshold quantity in a process; or
- (c) For a substance that is newly added to NAC 459.9533, a date which the division specifies, not to exceed 3 years after the date on which the substance is added.

3. The owner or operator of a facility in which the processes are subject to a combination of the tier A program and tier B program shall submit the assessment reports as follows:

- (a) For a process that is subject to the tier A program but not the tier B program, the owner or operator shall submit the assessment report pursuant to subsection 1.
- (b) For a process that is subject to the tier B program, or both the tier A program and tier B program, the owner or operator shall submit the assessment report pursuant to subsection 2.

4. An owner or operator shall make subsequent submissions of an assessment report pursuant to NAC 459.95468.

5. Notwithstanding the provisions of NAC 459.95452 to 459.95468, inclusive, an owner or operator may exclude information concerning a trade secret or confidential business information from the assessment report if that information meets the conditions set forth in:

- (a) NRS 459.3846, if the process is subject to the tier A program; or
- (b) 40 C.F.R. § 2.301, if the process is subject to the tier B program.

6. An owner or operator shall transmit information concerning a trade secret or confidential business information to a location that the division specifies as follows:

- (a) An unredacted paper copy of the assessment report must clearly identify each data element that is being claimed as information concerning a trade secret or confidential business information.
- (b) A redacted copy of the assessment report must be identical to the unredacted copy of the assessment report except that the owner or operator shall replace each data element, other than the chemical identity, which the owner or operator claims is information concerning a trade secret or

confidential business information with the notation "CBI" or a blank field. For chemical identities claimed as CBI, the owner or operator shall substitute a generic category or class name.

(c) The owner or operator shall submit both a redacted and unredacted version of the same document at the time of submission of the assessment report substantiating each claim of information concerning a trade secret or confidential business information.

7. An owner or operator shall not claim the following data as information concerning a trade secret or confidential business information:

(a) The registration data that is described in subsection 2 of NAC 459.95454, except the information in paragraph (h) or (j) of subsection 2 of NAC 459.95454;

(b) The off-site consequence analysis data that is described in subparagraphs (2) and (6) to (10), inclusive, of paragraph (c) of subsection 1 of NAC 459.95456;

(c) The accident history data that is described in NAC 459.95458;

(d) The prevention program data that is described in:

(1) Subsections 1 and 3, paragraph (a) of subsection 4 and subsections 5 to 13, inclusive, of NAC 459.9546; and

(2) Subsections 1 and 3, paragraph (a) of subsection 4 and subsections 5 to 18, inclusive, of NAC 459.95462; and

(e) The emergency response program data that is described in NAC 459.95464.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95452 Executive summary; submission of P.T.A.H. (NRS 459.3818, 459.3833)

1. An owner or operator shall provide, in the assessment report, an executive summary that includes, without limitation, a brief description of:

(a) The policies for accidental release prevention and the policies for emergency response at the facility;

(b) The substances that are handled at the facility;

(c) Each worst-case release scenario and alternative release scenario, including, without limitation, administrative controls and mitigation measures taken to limit the distances to the endpoint for each scenario;

(d) The accidental release prevention program and chemical-specific steps for prevention;

(e) The 5-year accident history;

(f) The emergency response program;

(g) Any planned changes to improve safety; and

(h) A P.T.A.H., if the facility has a process that is subject to the tier A program or tier B program level 2 or 3.

2. Recommendations that are made pursuant to a hazard review or process hazard analysis to minimize the likelihood of a release, fire or explosion involving a tier A or tier B substance, or to mitigate the effects of a release, fire or explosion involving a tier A or tier B substance, which has the potential for acute health impacts on employees or the public must be described in the P.T.A.H. as set forth in subsection 4.

3. Each prevention program element and emergency response element must be evaluated for compliance with NAC 459.95382 to 459.95442, inclusive. Recommendations made to enhance these elements, or to correct deficiencies, must be described in the P.T.A.H. as set forth in subsection 4.

4. For each recommendation made pursuant to subsections 2 and 3, the owner or operator shall provide:

- (a) A description of the hazard;
- (b) The cause of the hazard;
- (c) Consequences of the hazard;
- (d) A description of the recommendation; and
- (e) The implementation date for the recommendation.

5. A P.T.A.H. submitted pursuant to this section shall be deemed to satisfy the requirements of subsection 3 of NRS 459.3852 for a process that is subject to the tier A program.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95454 Registration form concerning substances. (NRS 459.3818, 459.3833)

1. An owner or operator shall complete a registration form that addresses all substances handled in any process at his facility and submit it with the assessment report.

2. The registration must include, without limitation:

(a) The name, street, city, county, state, zip code, latitude and longitude of the facility, and the method for obtaining the latitude and longitude;

(b) A description of the location on which the facility sits;

(c) The Dun & Bradstreet number of the facility;

(d) The name and Dun & Bradstreet number of any parent corporation;

(e) The name, telephone number and mailing address of the facility;

(f) The name and title of the person with overall responsibility for the implementation of C.A.P.P.;

(g) The name, title, telephone number during normal business hours and telephone number that is available 24 hours per day of an emergency contact;

(h) For each process:

(1) The name and C.A.S. number of each substance used in the process;

(2) The maximum quantity in pounds of each substance or mixture used in the process to two significant digits;

(3) The applicable N.A.I.C.S. code number; and

(4) The program tiers and program level to which the process is subject;

(i) The identifier that the United States Environmental Protection Agency has assigned to the facility;

(j) The number of full-time employees at the facility;

(k) Whether the facility is subject to 29 C.F.R. § 1910.119;

(l) Whether the facility is subject to 40 C.F.R. Part 355;

(m) Whether the facility has an operating permit as required pursuant to 40 C.F.R. Part 70 and, if applicable, the permit number; and

(n) The date of the last safety inspection of the facility by a federal, state or local governmental agency and the identity of the inspecting entity.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95456 Evaluation of off-site consequences. (NRS 459.3818, 459.3833)

1. An owner or operator shall evaluate off-site consequences pursuant to NAC 459.95362 to 459.95376, inclusive, and submit in the assessment report:

(a) One worst-case release scenario for each process that is subject to the tier B program level 1;

(b) For each process that is subject to either the tier A program or tier B program level 2 or 3:

(1) One worst-case release scenario to represent all substances designated as toxic in NAC 459.9533, or determined to be toxic by the owner or operator, that are held above the threshold quantity;

(2) One worst-case release scenario to represent all substances designated as either flammable or explosive in NAC 459.9533, or determined to be flammable or explosive by the owner or operator, that are held above the threshold quantity; and

(3) One alternative release scenario:

(I) For each substance designated as toxic in NAC 459.9533 that is held above the threshold quantity; and

(II) To represent all substances designated as flammable or explosive that are held above the threshold quantity; and

(c) The following data for each release scenario:

- (1) The chemical name of the substances;
- (2) A description of the scenario, including, without limitation, whether the scenario involves an explosion, fire, toxic gas release, or liquid spill and vaporization;
- (3) The quantity in pounds of the substance that is released;
- (4) The rate at which the substance is released;
- (5) The duration of the release;
- (6) The distance to the endpoint;
- (7) Public and environmental receptors that are located within the distance to the endpoint;
- (8) Any passive mitigation that is considered;
- (9) Any active mitigation that has been considered for an alternative release scenario;
- (10) If the substance is toxic:
 - (I) The percentage weight of the substance in a mixture;
 - (II) The physical state of the substance;
 - (III) The wind speed and atmospheric stability class used in the scenario; and
 - (IV) The topography of the geographical area used in the scenario; and
- (11) The basis of the results of the scenario, including, without limitation, the name of any model that is used.

2. If the owner or operator is required to submit additional worst-case release scenarios for toxics, flammables or explosives pursuant to NAC 459.95366, he shall provide the information required pursuant to this section.

(Added to NAC by Environmental Comm'n by R121-98, 5-27-99, eff. 6-21-99)

NAC 459.95458 Submission of 5-year accident history. (NRS 459.3818, 459.3833) An owner or operator shall submit in the assessment report the 5-year accident history created pursuant to NAC 459.95378.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.9546 Contents of report for tier B program level 2. (NRS 459.3818, 459.3833) For each process that is subject to the tier B program level 2 for which a separate hazard analysis review was conducted, the owner or operator shall provide in the assessment report:

1. The applicable N.A.I.C.S. code for the process;
2. The name of any chemical that was addressed in the analysis;
3. The date of the most recent review or revision of the safety information and a list of federal or state regulations or industry-specific design codes and standards used to demonstrate compliance with the safety information requirement;
4. The date of completion of the most recent hazard review or update, including, without limitation:
 - (a) The expected date of completion of changes resulting from the hazard review;
 - (b) The major hazards identified;
 - (c) The process controls in use;
 - (d) The mitigation systems in use;
 - (e) The monitoring and detection systems in use; and
 - (f) Changes since the last hazard review;
5. The date of the most recent review or revision of the operating procedures;
6. The date of the most recent review or revision of the training programs;
7. Whether the training occurred in a classroom, in a classroom and while on the job, or only while on the job;
8. The type of any competency testing that was used;
9. The date of the most recent review or revision of the maintenance procedures;
10. The date of the most recent inspection or test of the equipment and a list of the equipment that was inspected or tested;
11. The date of the most recent compliance audit and the expected date of completion of changes resulting from the compliance audit;
12. The date of the most recent incident investigation and the expected date of completion of changes resulting from the investigation; and
13. The date of the most recent change that resulted in a review or revision of safety information, the hazard review, operating or maintenance procedures, or training.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95462 Contents of report for tier A program or tier B program level 3. (NRS 459.3818, 459.3833) For each process that is subject to the tier A program or tier B program level 3 for which a separate process hazard analysis was conducted, the owner or operator shall provide:

1. The applicable N.A.I.C.S. code for the process;
2. The name of any chemical that was addressed in the analysis;
3. The date on which the safety information was last reviewed or revised;
4. The date of completion of the most recent process hazard analysis or update and the technique used, including, without limitation:
 - (a) The expected date of completion of changes resulting from the process hazard analysis;
 - (b) A summary of major hazards that were identified;
 - (c) A summary of process controls that are in use;
 - (d) A summary of mitigation systems that are in use;
 - (e) A summary of monitoring and detection systems that are in use; and
 - (f) A summary of changes that have been made since the last process hazard analysis;
5. The date of the most recent review or revision of the operating procedures;
6. The date of the most recent review or revision of the training programs;
7. Whether the training occurred in a classroom, in a classroom and while on the job, or only while on the job;
8. The type of competency testing that was used;
9. The date of the most recent review or revision of the maintenance procedures;
10. The date of the most recent inspection or test of the equipment and a list of the equipment that was inspected or tested;
11. The date of the most recent change that resulted in management of change procedures and the date of the most recent review or revision of management of change procedures;
12. The date of the most recent pre-startup review;
13. The date of the most recent compliance audit, required pursuant to NAC 459.95427, and the expected date of completion of changes resulting from the compliance audit;
14. The date of the most recent incident investigation and the expected date of completion of changes resulting from the investigation;
15. The date of the most recent review or revision of the employee participation plans;
16. The date of the most recent review or revision of the hot work permit procedures;
17. The date of the most recent review or revision of the contractor safety procedures; and
18. The date of the most recent evaluation of contractor safety performance.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95464 Emergency response plan. (NRS 459.3818, 459.3833) An owner or operator shall:

1. Provide in the assessment report:
 - (a) Whether he has created a written emergency response plan;
 - (b) Whether the emergency response plan includes specific actions to be taken in response to an accidental release of a tier A or tier B substance;
 - (c) Whether the plan includes procedures for informing the public and local agencies responsible for responding to accidental releases;
 - (d) Whether the plan includes information concerning emergency health care;
 - (e) The date of the most recent review or update of the emergency response plan; and
 - (f) The date of the most recent emergency response training for employees;
2. Provide the name and telephone number of the local agency with which emergency response activities or the emergency response plan is coordinated; and
3. List any other federal or state emergency plan requirements to which the facility is subject.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95466 Certification. (NRS 459.3818, 459.3833)

1. For a process that is subject to tier B program level 1, the owner or operator shall include in the assessment report a certification in substantially the following form:

Based on the criteria set forth in subsection 2 of NAC 459.95327, the distance to the specified endpoint for the worst-case accidental release scenario for the following process(es) is (are) less than the distance to the nearest public receptor: [list process(es)].

Within the past 5 years, the process(es) has (have) had no accidental release that caused on-site or off-site impacts.

No additional measures are necessary to prevent off-site impacts caused by accidental releases.

In the event of a fire, explosion or release of a tier A or tier B substance from the process(es), entry within the distance to the specified endpoints may pose a danger to public emergency responders. Therefore, public emergency responders should not enter this area except as arranged with the emergency contact indicated in the assessment report.

The undersigned certifies that, to the best of my knowledge, information and belief, formed after reasonable inquiry, the information submitted is true, accurate and complete.

[Signature, title, date signed]

2. For an assessment report submitted pursuant to NAC 459.95448 to 459.95464, inclusive, to which subsection 1 of this section does not apply, the certification must substantially conform to one of the following forms:

(a) I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information.

[Signature, title, date signed]

(b) I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attached documents and that, based on my inquiry of the natural persons immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false information.

[Signature, title, date signed]

3. The certification must be signed by the sole proprietor of the facility, the highest ranking corporate officer of the facility, a partner at the facility, the manager of the facility or a person designated by one of those persons to sign the certification.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95468 Reviews and updates. (NRS 459.3818, 459.3833)

1. The owner or operator shall review and update the assessment report as specified in subsection 2 and submit it in a method and format to a location that the division specifies.

2. The owner or operator shall review and update the assessment report:

(a) Within 5 years after the initial submission or most recent update of the report, whichever is later;

(b) After a substance is first listed pursuant to NAC 459.9533, not later than 3 years after the substance is listed or as required by the division, whichever occurs first;

(c) Not later than the date on which a substance that is listed in NAC 459.9533 is first present above the threshold quantity in a process that is not yet subject to the tier A program or tier B program;

(d) Not later than the date on which a substance that is listed in NAC 459.9533 is first present above the threshold quantity in a process that is already subject to the tier A program or tier B program;

(e) Within 6 months after a change that requires a revised process hazard analysis or hazard review;

(f) Within 6 months after a change that requires a revised off-site consequence analysis as set forth in NAC 459.95374; and

(g) Within 6 months after a change that changes the tier or program level to which a process is subject.

3. If a facility or single process changes so that it is no longer subject to C.A.P.P., the owner or operator shall submit a revised registration to the division within 6 months after the change indicating that the facility or process is no longer subject to C.A.P.P.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Assessment Team

NAC 459.95472 Qualifications of members. (NRS 459.3818)

1. The members of an assessment team must have:

(a) Completed collectively at least one previous project in:

- (1) Engineering related to chemical processes;
- (2) Engineering related to safety;
- (3) The preparation of operating procedures;
- (4) The preparation or review of procedures for maintenance;
- (5) The preparation or review of procedures for safety;
- (6) The preparation or review of programs to train operators;
- (7) The performance or review of investigations of accidents;
- (8) The performance of analysis of hazards;
- (9) The performance of risk assessments;
- (10) The preparation or review of plans for response to emergencies; or
- (11) The performance of audits of programs to manage risks; or

(b) Knowledge of the state of the art in the technology of the processes that are used.

2. At least one member of the assessment team must be a licensed professional engineer in this state.

3. At least one member of the assessment team must have experience and knowledge specific to the operations or process being evaluated.

4. The leader of the assessment team must have experience as a project or operations manager.

5. The technical leader of the assessment team must have:

(a) Completed training specific to conducting or leading a process hazard analysis; and

(b) Participated in at least three process hazard analyses.

6. Persons may be used interchangeably to fulfill the different roles that are described in NAC 459.95474 if the persons have been approved by the division.

(Added to NAC by Div. of Environmental Protec., eff. 7-10-92; A by Environmental Comm'n by R121-98, 5-27-99)—(Substituted in revision for NAC 459.9536)

NAC 459.95474 Duties. (NRS 459.3818)

1. The entire assessment team shall:

(a) Actively participate in the work sessions for the process hazard analysis and the review of the report of the process hazard analysis;

(b) Review and approve the content of the assessment report and P.T.A.H.; and

(c) Review the findings or recommendations that result from an audit performed pursuant to subsection 2 and may revise the findings and recommendations.

2. Individual members of the assessment team may audit select elements of the prevention program and emergency response program.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95476 Submission of information to division. (NRS 459.3818)

1. Pursuant to the schedule set forth in subsection 2, the owner or operator shall submit to the division:

(a) The qualifications of each member of the assessment team in any of the following areas:

(1) Engineering related to chemical processes;

(2) Engineering related to safety;

(3) The preparation of operating procedures;

(4) The preparation or review of procedures for maintenance;

(5) The preparation or review of procedures for safety;

(6) The preparation or review of programs to train operators;

(7) The performance or review of investigations of accidents;

(8) The performance of analyses of hazards;

(9) The performance of risk assessments;

(10) The preparation or review of plans for response to emergencies;

(11) The performance of audits of programs to manage risks; or

- (12) The state of the art as it relates to the technology of the processes used;
- (b) The résumé for each member of the assessment team;
- (c) The qualifications and experience of any additional person who may work with the assessment team;
- (d) The expected date of when the assessment will begin and the schedule for performing the assessment;
- (e) The estimated number of hours each assessment team member is expected to work on the assessment;
- (f) The extent to which the team will use collateral items such as computers, software and outside consultants;
- (g) The name, area of expertise and registration number of at least one member of the team who is a professional engineer and is licensed as such in this state;
- (h) The name of at least one member of the team who has experience and knowledge specific to the operations or process being evaluated and documentation of such experience;
- (i) The name of the member of the team who has been designated as the team leader and documentation that the person has experience as a project or operations manager;
- (j) The name of the member of the team who has been designated as the technical leader and documentation that the person has:
 - (1) Completed training specific to the assessment of chemical hazards; and
 - (2) Participated in at least three assessments of chemical hazards;
- (k) The scope and boundaries of the process and proposed methodology for the process hazard analysis; and
- (l) A clear and concise description of how the assessment team will evaluate:
 - (1) The emergency response program;
 - (2) Process safety information;
 - (3) The process hazard analysis;
 - (4) Standard operating procedures;
 - (5) Training; and
 - (6) The maintenance program and procedures.

2. For a process that is subject to:

(a) The tier A program but not the tier B program, the owner or operator shall submit the information required pursuant to this section within 60 days after being notified by the division that the assessment report is due.

(b) The tier A program and tier B program, the owner or operator shall submit the information required pursuant to this section before conducting the assessment.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Annual Compliance Report

NAC 459.9548 Submission. (NRS 459.3818) Within 30 days after each anniversary of the date on which the P.T.A.H. was adopted, the owner or operator shall submit a report of compliance for any process that is subject to the tier A program.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95482 Content. (NRS 459.3818) The annual report of compliance required pursuant to NAC 459.9548 must include, without limitation:

1. Each P.T.A.H. recommendation listed in the assessment report that is made for a process which is subject to the tier A program;

2. The date on which implementation of the P.T.A.H. recommendations are due;

3. The status of implementation of the P.T.A.H. recommendations;

4. Comments by the owner or operator on the status of implementation of each P.T.A.H. recommendation;

5. Any efforts that were undertaken by the owner or operator during the previous calendar year to assess and reduce risks related to tier A substances;

6. Any changes in maintenance schedules and activities and any unanticipated maintenance on critical equipment or safety controls related to tier A substances that was conducted at the facility during the previous calendar year;

7. Any efforts undertaken by the facility to assess and remedy the release of any quantity of a tier A substance;

8. Any other information requested by the division; and

9. A certification as set forth in subsection 2 of NAC 459.95466.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Two Release Provisions

NAC 459.95486 Requirements for exemption from C.A.P.P. (NRS 459.3818)

1. A process that is otherwise subject to C.A.P.P. pursuant to paragraph (b) of subsection 1 of NAC 459.95323 is not subject to C.A.P.P. if:

- (a) Two or more years have elapsed since the division received the assessment report;
- (b) The owner or operator has complied with all relevant requirements of C.A.P.P. in the past;
- (c) The recommendations from the P.T.A.H. developed pursuant to NRS 459.3852 are verified by the division to be complete; and
- (d) The state environmental commission has granted the exemption pursuant to NAC 459.95488.

2. The division shall require continued compliance with C.A.P.P. until the P.T.A.H. is completed and the state environmental commission has granted the exemption pursuant to NAC 459.95488.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95488 Request for exemption from C.A.P.P. (NRS 459.3818)

1. In order to be granted an exemption by the state environmental commission from C.A.P.P., the owner or operator of a facility with a process that is subject to C.A.P.P. pursuant to paragraph (b) of subsection 1 of NAC 459.95323 must submit:

- (a) A written letter to the division requesting exemption from C.A.P.P.; and
- (b) The most recent annual report of compliance, indicating that all measures of the P.T.A.H. have been completed.

2. Not later than 60 calendar days after the division receives the letter and report submitted to it pursuant to subsection 1, the division shall verify that all measures of the P.T.A.H. have been completed.

3. Not later than 90 calendar days after the division receives the letter and report submitted to it pursuant to subsection 1, the division shall:

- (a) Document its findings concerning its investigation into whether all measures of the P.T.A.H. have been completed; and
- (b) Notify the owner or operator in writing whether the division has found that all measures of the P.T.A.H. have been completed.

4. Once the owner or operator has received notice that the division has found that all measures of the P.T.A.H. have been completed, he may petition the state environmental commission to become exempt from C.A.P.P. by filing with the secretary of the state environmental commission:

- (a) A letter requesting exemption from C.A.P.P.; and
- (b) A copy of the findings of the division made pursuant to subsection 3.

5. Upon receiving the letter and findings from an owner or operator pursuant to subsection 4, the secretary of the state environmental commission shall:

(a) Schedule a review of the petition at the next meeting of the state environmental commission; and

(b) Notify the public by publication and the use of public service announcements of the petition.

6. At the hearing, the state environmental commission will consider the following to determine whether it will grant the petition:

(a) Whether the causes of any releases have been adequately mitigated to prevent future releases;

(b) Whether the facility has an adequate program in place to maintain the accident prevention program established pursuant to C.A.P.P.;

(c) Whether the division believes that the exemption should be granted; and

(d) Whether the facility has had an accidental release since becoming subject to C.A.P.P.

7. If the state environmental commission:

(a) Grants the exemption, the exemption will become effective on the day following the hearing.

(b) Does not grant the exemption, the commission will provide the owner or operator with an explanation of the reason the commission denied the exemption.

8. The owner or operator may reapply for the exemption at any time.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Revalidation

NAC 459.9549 Process hazard analysis. (NRS 459.3818, 459.3833)

1. The revalidation of a process hazard analysis that is required pursuant to NAC 459.95414 must:

(a) Confirm pursuant to NAC 459.95494 to 459.955, inclusive, that the analysis or review is valid for the current process; and

(b) Satisfy the requirements of NAC 459.95414.

2. The owner or operator may perform a new process hazard analysis in lieu of revalidating a previous analysis, if:

(a) The process hazard analysis satisfies the requirements of NAC 459.95414; and

(b) All the supporting information, including, without limitation, the process safety information, operating procedures, training program, mechanical integrity program and emergency response program reflect current operations.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95492 Hazard review. (NRS 459.3818, 459.3833)

1. The revalidation of a hazard review that is required pursuant to NAC 459.95388 must:

(a) Confirm pursuant to NAC 459.95496, 459.95498 and 459.955 that the analysis or review is valid for the current process; and

(b) Satisfy the requirements of NAC 459.95388.

2. The owner or operator may perform a new hazard review in lieu of revalidating a previous review, if:

(a) The hazard review satisfies the requirements of NAC 459.95388; and

(b) All the supporting information, including, without limitation, the safety information, operating procedures, training program, maintenance program and emergency response program reflect current operations.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95494 Tier A program. (NRS 459.3818, 459.3833) Revalidation of a facility with a process that is subject to the tier A program must be conducted by an assessment team which satisfies the requirements of NAC 459.95472.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95496 Process safety information. (NRS 459.3818, 459.3833) If process safety information or a change in process safety information was subject to a process hazard analysis or hazard review, the owner or operator is not required to revalidate the analysis or review if the analysis or review reflects the current process.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.95498 Current procedures and programs. (NRS 459.3818, 459.3833)

1. A revalidated process hazard analysis or hazard review must reflect current operating procedures, training programs, maintenance programs and emergency response programs.

2. If a change in operating procedures, training programs, maintenance programs and emergency response programs was subject to a process hazard analysis or hazard review, the owner or operator is not required to revalidate the analysis or review if the analysis or review reflects the current procedures and programs.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

NAC 459.955 Consideration of incidents. (NRS 459.3818, 459.3833)

1. All incidents that had the potential for, or actually resulted in, a release, fire or explosion involving a tier A or tier B substance must be considered by the person or team conducting a revalidation of a process hazard analysis or hazard review.

2. The revalidation of the analysis or review must include, without limitation:

- (a) A review of the recommendations that were made as a result of the investigation; and
- (b) Confirmation that the recommendations are being implemented in a timely manner.

3. If a deficient element of a prevention program was a contributing factor to an incident, the person or team conducting the revalidation shall make recommendations to correct the deficiency.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Change in Ownership

NAC 459.95512 Requirements. (NRS 459.3818, 459.3833) If a facility with a process that is subject to the tier A program or tier B program changes ownership, the new owner or operator shall comply fully with the requirements of NRS 459.380 to 459.3874, inclusive, and any regulations adopted pursuant thereto and:

1. If the annual registration required pursuant to NAC 459.95348 is not due, satisfy the requirements for registration set forth in NAC 459.9535 and 459.95358 not later than 14 days after the transfer of ownership; or

2. If the annual registration required pursuant to NAC 459.95348 is due, submit the annual registration.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Management Systems

NAC 459.95516 Development. (NRS 459.3818, 459.3833) The owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3 shall develop a management system to oversee the implementation of all requirements of C.A.P.P. and:

1. Assign a qualified person to have overall responsibility for the development, implementation and integration of the requirements of C.A.P.P.; or

2. Create a team with overall responsibility for the development, implementation and integration of the requirements of C.A.P.P. The owner or operator shall document:

(a) The names of the persons who are members of the team; and

(b) The relevant lines of authority for the team by means of an organization chart or similar document.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Inspections

NAC 459.9552 Determination of compliance. (NRS 459.3818, 459.3833)

1. The division:

(a) Shall conduct an annual inspection to determine compliance at each facility with a process that is subject to the tier A program pursuant to subsection 4 of NRS 459.387;

(b) May, in addition to the annual inspection to determine compliance, inspect a facility with a process that is subject to the tier A program for program compliance pursuant to subsection 1 of NRS 459.387;

(c) May inspect a facility with a process that is subject to the tier B program to determine whether the facility complies with program requirements, including, without limitation, compliance with:

(1) The prevention program developed pursuant to NAC 459.95382 to 459.95435, inclusive;

(2) The emergency response program developed pursuant to NAC 459.9544 and 459.95442; and

(3) The requirements of the hazard assessment developed pursuant to NAC 459.95362 to 459.95378, inclusive; and

(d) May audit the components of the facility's assessment report submitted pursuant to NAC 459.95448 to 459.95468, inclusive, that contain processes subject to the tier B program to verify the accuracy of the report.

2. The division shall make the records of all inspections and audits made pursuant to this section available for public review.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Enforcement

NAC 459.95524 Applicability. (NRS 459.3818, 459.3833) The division may take enforcement action at a facility with a process that is subject to:

1. The tier A program pursuant to NRS 459.3872 and 459.3874; and

2. The tier B program pursuant to paragraph (c) of subsection 2 of NRS 459.3833 and 459.3834.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)

Standards and Codes

NAC 459.95528 Adoption by reference. (NRS 459.3818, 459.3833) The following provisions are hereby adopted by reference:

1. Codes 211112, 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311 and 32532 of the 1997 version of the N.A.I.C.S. A copy may be obtained from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161, at a cost of \$28.50.

2. N.F.P.A. 704, the Standard System for the Identification of the Hazards of Materials for Emergency Response. A copy may be obtained from the National Fire Protection Association, 11 Tracy Drive, Avon, Massachusetts 02322-9908, at a cost of \$18.50.

3. N.F.P.A. 30, the 1996 version of the Flammable and Combustible Liquids Code. A copy may be obtained from the National Fire Protection Association, 11 Tracy Drive, Avon, Massachusetts 02322-9908, at a cost of \$24.75.

4. ERPG-2 of the Emergency Response Planning Guidelines Series. A copy may be obtained from the American Industrial Hygiene Association, 2700 Prosperity Avenue, Suite 250, Fairfax, Virginia 22031, at a cost of \$310.

5. The R.M.P. Off-Site Consequence Analysis Guidance. A copy may be obtained free of charge from the United States Environmental Protection Agency, P.O. Box 42419, Cincinnati, Ohio 45242-2419.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99)